Getting Started:: Teachers

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Subscribing to Dr Frost

Go to www.drfrostmaths.com and Click 'Sign Up'.

Subscribing to Dr Frost

Let's get started...

Click "I'm a Teacher", this will allow you to register as an individual teacher. Once registered, you will be able to subscribe and add more teacher accounts.

I'm a Student

Able to practise questions independently as well as complete homework assigned to you.

I'm a Teacher

Able to set homeworks, manage student lists, access the database of questions and monitor student progress.

I'm a Parent

Able to create new accounts for each of your children, set tasks, monitor progress and build worksheets.

If you work as a consultant across a Multi-Academy Trust, please **get in touch** for a MAT administrator account. You can see how we collect and use your data on our **Privacy Policy**.

Multi Academy Trusts may choose to have a trust subscription. Please contact us directly using support@drfrostmaths.com to subscribe and give permissions for a MAT administrator account.

Subscribing to Dr Frost

Sign up as a teacher with...

G   Sign up with Google
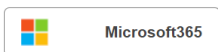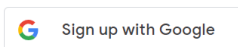
■■ Microsoft365

Sign up with Google, Microsoft365 or search your school's name or postcode. All schools in England and Wales should be listed.

or search for your school

🔍 Search by name or postcode/zipcode

→ I can't find my school

You can complete a request form if your school is not listed. Our support team will review the request. Please note your institution must either be a school, or an established public service e.g. prisons, hospitals, registered community project etc.

We will reject requests from tutoring agencies and explicitly for-profit institutions.

'Home tutoring' does not constitute a school; please instead register for a 'Parent' account.

Subscribing to Dr Frost

And some final info…

School: **Tiffin School**

Title: [- ⌄]

First Name: [   ]

Surname: [   ]

School Email: [   ]

Teacher registrations using personal email addresses will **not be approved.** A school email address verifies your position at your school.

Monthly Newsletter: [- ⌄]

Just once a month we send out a newsletter about new features on the site (which you can unsubscribe from at any time). Happy to receive this?

Set a Password: [   ]

Confirm Password: [   ]

[I'm Done]

> Teachers must register with their school email address. Personal email addresses will not be approved.

Subscribing to Dr Frost

Once a teacher from your school has registered with Dr Frost, the school will need to subscribe to create more teacher accounts.

Use the top left **Menu -> Classes & Settings** and then select 'Subscription'.

Subscribing to Dr Frost

As part of our charity's vision to make sure our services are available to all schools regardless of budget, we allow schools to apply a discount at their discretion; while schools are expected to pay a fee, we'd rather schools use it at a discounted price/for free than not at all.

Click 'Show Discount Options' to apply a discount to the subscription fee.

Click 'Generate Invoice' and follow the instructions for how to make the payment. You will need to email subscriptions@drfrostmaths.com to notify us when you have paid. If the invoice is for £0, your school's **head of faculty/department** must email the invoice to the subscriptions team.

Home dashboard

Use this search bar to search for skills (e.g. Pythagoras) or students (e.g. to change their class).

:: Menu   dfm   🔍   J Frost [23]

Hx L Debbr
Tiffin School

🏆 School Rank
7th

🪙 Points This Year
3,880,467

School Engagement
6/6

Help & Training

Work

My Worksheets   View All Tasks

✔ **Edexcel GCSE (9-1) Nov 2019 2H**
0/32   All of 11X1/Ma, No due date   `89%`

✔ **Edexcel GCSE(9-1) Nov 2017 1H**
10/32   All of 11X1/Ma, No due date   `93%`

✔ **K83a Expand a single bracket with an integer on the front.**
0/2   All of Demo Test Class, No due date

Set a Task

Your dashboard shows the latest tasks you have set. Click 'View all Tasks' to see all.

Notifications

✔ Qnukov Ohssbbk (09L8/Ku) completed an independent practice and achieved   `50%`
YESTERDAY
Edexcel GCSE(9-1) June 2019 1H

✔ Oofwc Khcw (02V1/Hi) completed an independent practice and achieved   `48%`
..AY
..el GCSE (9-1) Nov 2019 2H

..Xvefg (58L6/Ld) completed an ..ependent practice and achieved   `38%`
2 DAYS AGO
Edexcel G...

✔ Whih Pvu...
an indep...
achieved...
2 DAYS AGO
Senior Ka...

✔ Lklws Nj...
independ...
2 DAYS AGO
Edexcel G...

Notifications show the recent activity of students in your classes. You can click a notification to see the student's answers and leave feedback.

Progress Data

View Student Progress

Week Summary   Top Students

Tasks set	0
Questions answered	5314
Independent questions	5124

Resources

Dr Frost Learning is a registered charity
in England and Wales (no 1194954)

Home dashboard

Hx L Debbr
Tiffin School

School Rank
7th

Points This Year
3,880,467

School Engagement
6/6

Help & Training

Work

My Worksheets   View All Tasks

✓ Edexcel GCSE (9-1) Nov 2019 2H   **89%**
0/32   All of 11X1/Ma, No due date

✓ Edexcel GCSE(9-1) Nov 2017 1H   **93%**
10/32   All of 11X1/Ma, No due date

✓ K83a Expand a single bracket with an integer on the front.
0/2   All of Demo Test Class, No due date

Set a Task

Click 'Help and Training' to sign up to a virtual training session or to view help videos.

Use the quick links to 'My Worksheets' and 'View Student Progress'.
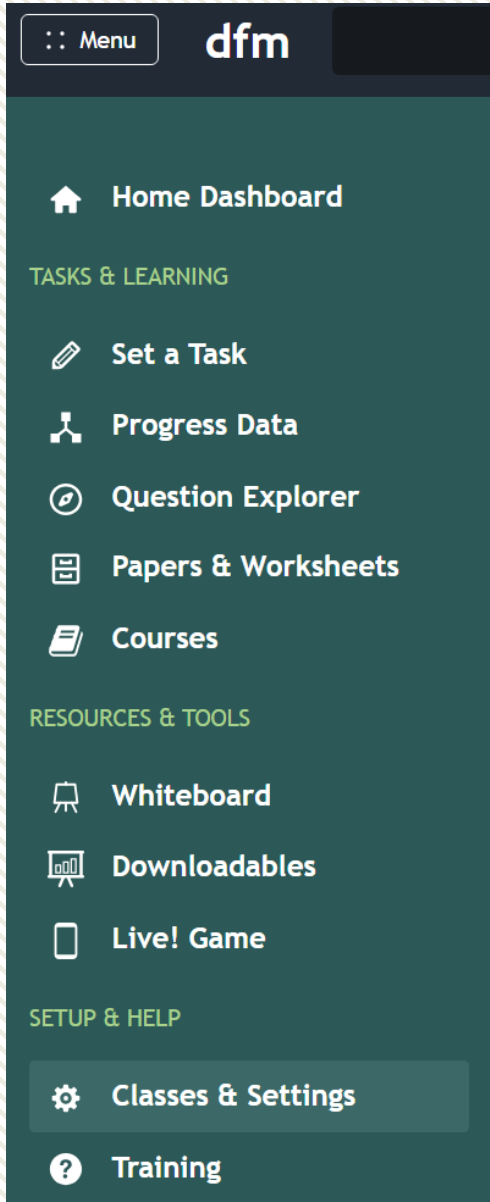
Notifica...

✓ Qnukov ... completed ... and achie...
YESTERDAY
Edexcel GCSE(9-1) June 2019 1H

✓ Oofwc Khcw (02V1/Hi) completed an
independent practice and achieved   **48%**
...TERDAY
Edexcel GCSE (9-1) Nov 2019 2H

...x Kvefg (58L6/Ld) completed an
independent practice and achieved   **38%**
2 DAYS AGO
Edexcel GCSE(9-1) Mock Set 4 Autumn 2018 2H

✓ Whih Pvuph (04O4/Wb) completed
an independent practice and
achieved   **85%**
2 DAYS AGO
Senior Kangaroo 2016

✓ Lklws Njpn (65M6/Cd) completed an
independent practice and achieved   **55%**
2 DAYS AGO
Edexcel GCSE(9-1) Nov 2019 3H

Progress Data

View Student Progress

Week Summary   Top Students

Tasks set	0
Questions answered	5314
Independent questions	5124

Resources

The left menu

Set a task: Set a new homework/classwork task to students. You can select questions by topic, from past papers, or build a worksheet from scratch.

Progress Data: View your mark book, analyse student progress by task, leave feedback, view student mastery by course or by topic, view school leaderboards.

Question Explorer: Explore both exam questions and 'Key Skill' questions (i.e. randomly generated questions), including accompanying videos.

Papers and Worksheets: Access worksheets you have created in your teacher directory, or access worksheets saved in your school shared area. You can also access past papers, Dr Frost revision worksheets and Dr Frost topic tests.

Courses: A 'course' is a scheme of work designed to bring together the resources of Dr Frost in an ordered way. They can be assigned to your learners to support independent practice. You can build your own courses, or you can assign courses from exam boards/ publishers/ Dr Frost courses.

Whiteboard: A virtual whiteboard where you can import questions and connect with student devices.

Downloadables: Downloadable teacher resources, including lesson PowerPoints, worksheets, activities, assessments and our popular 'Full Coverage' materials.

Live! Game: a classroom game where students simultaneously answer questions on their mobile device. You can create a worksheet in advance of play or start play immediately from 'Set a Task'.

Classes & Settings: Set up and manage classes and teachers. Manage your school settings and subscription.

The top menu

J Frost 23

- My Dashboard
- Log Off
- View as Student
- Account Settings

You have 23 pieces of unread feedback from students regarding completed work.

✓ Mungqb Xdgdrkd (81H6/Pf) completed an independent practice and achieved 50%

Hx L Debbr
Tiffin School

School Rank **7th**   Points This Year **3,880,467**   School Engagem **6/6**

You will receive a notification if a student has written feedback. Click the notification to read and respond to the feedback.

Work

✓ 0/32 **Edexcel** All of 11X1

✓ 10/32 **Edexcel GCSE(9-1) Nov 2017 1H** All of 11X1/Ma, No due date

✓ 0/2 **K83a Expand a single bracket with an integer on the front.** All of Demo Test Class, No due date

Set a Task

Every class at your school has a 'demo account'. Click 'View as Student' to log in to the demo account. From here you can view/complete tasks set to your class and see the experience as a student.

Notifi

✓ Qnukov Ohssbbk (09L8/Ku) completed an independent practice **50%**

Edexcel GCSE (9-1) Nov 2019 2H

Change your password, link your account to Google/ Office 365, and so on.

✓ Whih Pvuph (0404/Wb) completed an independent practice and achieved **85%**
2 DAYS AGO
Senior Kangaroo 2016

✓ Lklws Njpn (65M6/Cd) completed an independent practice and achieved **55%**
2 DAYS AGO
Edexcel GCSE(9-1) Nov 2019 3H

Progress Data

View Student Progress

Week Summary   Top Students

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Independent questions	5124

Resources

Setting up classes

Click the top left menu and choose **'Classes and Settings'**.

We **highly recommend** a bulk import for setting up classes, particularly to reset your class groupings at the start of the academic year.

Use this button to create a single class and add students one by one. Unless adding a small class or intervention group, **we don't recommend this option.**

Tip: Before performing a bulk import, export your existing class lists to Excel as a backup. The class lists can be restored using **Import by spreadsheet** should you encounter any problems.

Import by spreadsheet

Press **Import by Spreadsheet** and follow the instructions to download an Excel spreadsheet you will need to populate.

Import by Spreadsheet

Student accounts which are already active will be unaffected, except that the class groupings will be changed.

You must first **download this spreadsheet file** and use it to fill in your class lists. Then upload this file using the form below.

Import File: Choose file | No file chosen

Mode:
- ● My spreadsheet con... students in my scho... class groupings will... **WARNING: Do not u... to add individual cl... set up all your scho... This will wipe all e... lists for the whole ...**
- ○ My spreadsheet only... classes I want to ad... other existing accou... alone.
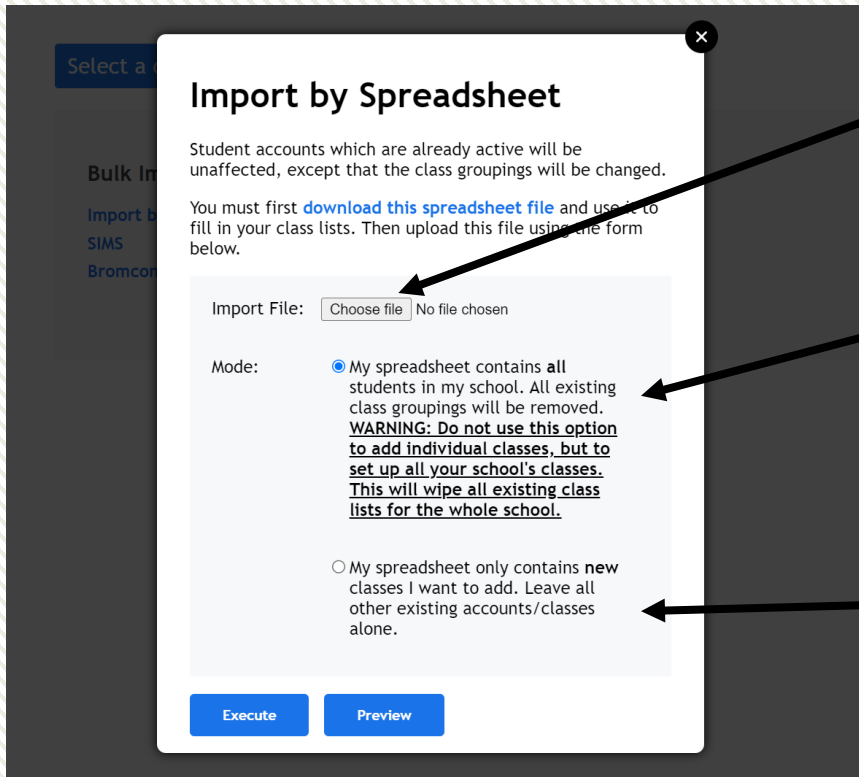
Execute | Preview

DFM Class Import Facility

Fill in this spreadsheet with your new class lists. This may include a mixture of existing and new students. For existing students, this import facility will allow you to change their class. Blank rows and any data outside columns B-F will be ignored.

Surname	Firstname	Class	Yeargroup	Email address (optional)
Bloggs	Joe	7JAF	7	2849@myschool.sch.uk

Copy and paste data into the required fields to list all your students. If you don't specify an email address, the student will be allocated a username (e.g. jfrost-2594) and a random password, which the student can change. Students who already have an account will be transferred into their new class, and new students will be issued with new accounts.

Import by spreadsheet

Import by Spreadsheet

Student accounts which are already active will be unaffected, except that the class groupings will be changed.

You must first **download this spreadsheet file** and use it to fill in your class lists. Then upload this file using the form below.

Import File: [Choose file] No file chosen

Mode:
- My spreadsheet contains **all** students in my school. All existing class groupings will be removed. **WARNING: Do not use this option to add individual classes, but to set up all your school's classes. This will wipe all existing class lists for the whole school.**
- My spreadsheet only contains **new** classes I want to add. Leave all other existing accounts/classes alone.

[Execute] [Preview]

Use this button to select your saved import Excel spreadsheet.

If you're starting a new school year you should use the first option. This will start all your class groupings from afresh. Remember, you can recover the original class groupings if you export to Excel. **This mode will never delete any active student accounts.**

The second option is useful to add additional classes when you've previously already set some up.

We recommend using the **Preview** button before you execute the import. This will show you what the import will do, including any existing accounts identified.

Import by spreadsheet

Import successfully completed. You can now view each class to assign teachers and courses.

If your import included email addresses, your students should now be receiving automated emails to activate their accounts and set a password/link with Google or Microsoft.

If you created accounts without email addresses, then after selecting the class, we recommend exporting your class, using Class Options → Export to Excel, which will include all the passwords we have generated for them. Passwords for accounts *with* email addresses will not be visible.

Note that if you have included email addresses, the student will receive an activation email.

Otherwise, you can share login details with your class by exporting the class list to Excel.

:: Menu   dfm   🔍

Account

Classes

Teachers

School Settings

Subscription

Audit Log

← **My New Class**
5 students

Year
Year 10 ▾

Teachers
Ms Maddie McDonagh

Assigned Courses
NONE

Class Options ▾
Delete Class
Get Join URL
Class demo account
Export to Excel

+ Students   Apply action ▾

☐	STUDENT	CLASSES	EMAIL/USERNAME	LOGIN METHOD	LAST LOGIN
☐	Clark, Heidi	(My New Class)	hclark-168624	Password	Never
☐	Cruz, Marco	(My New Class)	mcruz-168624	Password	Never
☐	Habib, Azeem	(My New Class)	ahabib-168624	Password	Never
☐	Stevens, Mathew	(My New Class)	mstevens-168624	Password	Never
☐	Yang, Jasmina	(My New Class)	jyang-168624	Password	Never

Sharing student passwords

The student passwords can now be seen in the Excel file.

Surname	Firstname	Class	Yeargroup	Email/Username	Password
Clark	Heidi	My New Class	10	hclark-168624	26997
Habib	Azeem	My New Class	10	ahabib-168624	75631
Cruz	Marco	My New Class	10	mcruz-168624	43306
Yang	Jasmina	My New Class	10	jyang-168624	34832
Stevens	Mathew	My New Class	10	mstevens-168624	74168

Import from a school data system (MIS)

:: Menu dfm

M McDonagh ⌄

Account
Classes
Teachers
School Settings
Subscription
Audit Log

Select a class ⌄

Bulk Import
Import by spreadsheet
Wonde

Class Options
+ Create
Export to Excel

If your school is subscribed, you can import from a school data management system by syncing with Wonde.

We're just about to check whether your school is set up for Wonde. Choose one of the options below.

Please note that a DrFrostMaths subscription is required to synchronise with MIS systems.

Sync   Preview

Press **'Sync'** and confirm you give permission for Wonde to set up your school. Once Wonde linking has been approved, you will need to return to this page and press **'Sync'** again in order to select the subjects/classes you wish to be available on Dr Frost.

Create a single class

You can create classes one at a time. We only recommend using this option when creating small classes or an intervention group as you will need to add the students one by one.

Give the class a name and assign with the relevant teacher. We recommend adding the teachers in your school first so you can assign them to classes you create. It is possible to assign teachers to classes at a later stage in class settings.

Create a single class

Once you've created the class, you will see a quick on-screen tutorial. You can use the **+Students** button to add students one at a time.

Enter the student's details. If you don't wish to specify an email address, the student will be allocated a username (e.g. jfrost-2594) and a random password, which the student can change.

If there's a matching student, you'll be given the option to use this existing account or create a new account. If you specify an email address for an existing account, it'll automatically use this account without prompting.

Managing students and classes

Click the row to select a student. When a selection is made, the **Apply Action** dropdown will become visible. You can select more than one student and apply the same action e.g. move class.

If an email address is associated with a student account, rows with **'Unactivated'** are students who haven't yet clicked the link in the automated email they received. If necessary, you can select any such rows and use the **Force Activation** option within the **Apply Action** dropdown. This activates their account and temporarily sets their password to **password**.

Managing students and classes

:: Menu   dfm

Account

Classes

Teachers

School Settings

Subscription

Audit Log

← **My New Class**
4 students

Year	Teachers	Assigned Courses	Class Options
5th Form	Ms Maddie McDonagh	NONE	⌄

+ Students   Apply action ⌄

	STUDENT	CLASSES	EMAIL/USERNAME	PASSWORD	LAST LOGIN
☐	Granger, Hermione	(My New Class)	hgranger-168624	71240	2 months ago
☐	Islington, Angel	(My New Class)	*** Personal Email Address	50341	Unactivated ?
☐	Rose, Petal	(My New Class)	prose-168624	50700	Unactivated ?
☐	Weasley, Ron	(My New Class)	rweasley-168624	60876	Never

Important Note: If a student does not use their school email address to register, then their email will appear as "*Personal Email Address*". This allows for appropriate Safeguarding. You can update the email on the student's account to their school email address if you wish.

School Settings

School Settings

Main Details   Logo

School Name: Ravenpuff School

Town/City: The Shire

Country: England

Post/Zip Code:

Timezone: Europe/London

Minimum age: 11

Maximum age: 18

Phase: Secondary

Yeargroup Namings: UK1

UK1 uses Reception and Year 1-13. *UK2* students. *UKSixthForm* restricts to Year native year group namings for a variety

Default Email Extension: @ ravenpuff.sch.uk

If you wish to allow multiple extensions (uppercase), putting the preferred one Specifying email extension(s) allows DF have used a personal or school email a

Leaderboard Use: No restrictions

    No restrictions
    Global Opt-Out
    No internal leaderboards for stud

Update

To access your school's settings go to **Menu → Classes & Settings → School Settings**

You can upload your school logo if not already set.

The intended time for due dates/set dates on set tasks is based on the underlying time zone of the browser you are using. Be wary of this if setting tasks to students in a different country!

Choose your preferred year group naming. For example, UK1 uses "Reception, Year 1, Year 2, …". UK2 uses "1st Form, 2nd Form, …". We also have the native naming conventions in various countries.

Set the school email extension to ensure the system knows what a 'school email address' is versus a personal email address. If you have multiple extensions (e.g. one for students and one for teachers), write both extensions, separating them using OR and typing a space before and after.
e.g. *students.myschool.sch.uk OR teachers.myschool.sch.uk*

You can change the leaderboard settings to opt out entirely, or to remove access to the leaderboard on student accounts.

The 'mastery' measure

1. Key Stage/ Age Range	KS3/KS4
2. Strand	Algebra
3. Topic	Expanding Brackets
4. Skill	Expand a single bracket
5. Subskills	Either exam practice (E) or Key Skill practice (K)

KS3/4 → Algebra →

Expanding Brackets

The student's mastery measure is between 1-100. Their mastery goes up or down, depending on both the difficulty of the questions answered, and on whether they answer the questions correctly.

☐ 83 **Expand a single bracket.**
   Mastery: 67/100

OR NARROW DOWN	VIDEO	DIFFICULTY	RECENT ACCURACY
☐ E83: Exam Practice: Expand a single bracket.	Browse ▦	1-4	
☐ K83a: Expand a single bracket with an integer on the front.	Example ▦	1	100%
☐ K83b: Expand a single bracket requiring simplification.	Example ▦	2	80%
☐ K83c: Expand a single bracket with an algebraic term at the front.	Example ▦	2	40%
☐ K83d: Expand two sets of single brackets and collect like terms.	Example ▦	3	90%
☐ K83e: Expand two sets of single brackets where the second bracket has a negative coefficient.	Example ▦	4	30%

Usually, the subskills within a skill span difficulty 1-4. This means that success with difficulty 1 questions relates to a mastery value 0-25, success with difficulty 2 questions increases their mastery to a value between 25-50 etc. Consequently, a student can only achieve higher mastery by succeeding at more difficult questions.

In the example above, the student's current mastery is 67. They need to demonstrate success with difficulty 4 questions for their mastery measure to increase beyond 75.

The 'mastery' measure

Trophies 15/37

Points This Year 1391

Mastery 12 | 5 | 3

Students earn 3-6 points per correctly answered question based on its difficulty. Unlike mastery, points can never go down, and points are an overall tally rather than associated with specific skills.

A student's mastery measure for each skill is visually represented by 3 bars, orange, green and purple. They will see how many skills they have mastered at each level on their dashboard. Each skill has a different mastery threshold for orange, green and purple (e.g a mastery of 85+ for 3 purple bars).

Your mastery for this skill has increased.
179 Expand two brackets.

+8

Set a task

Click the top left menu and choose **'Set a task'.** Alternatively click the **Set a Task** button on your home dashboard.
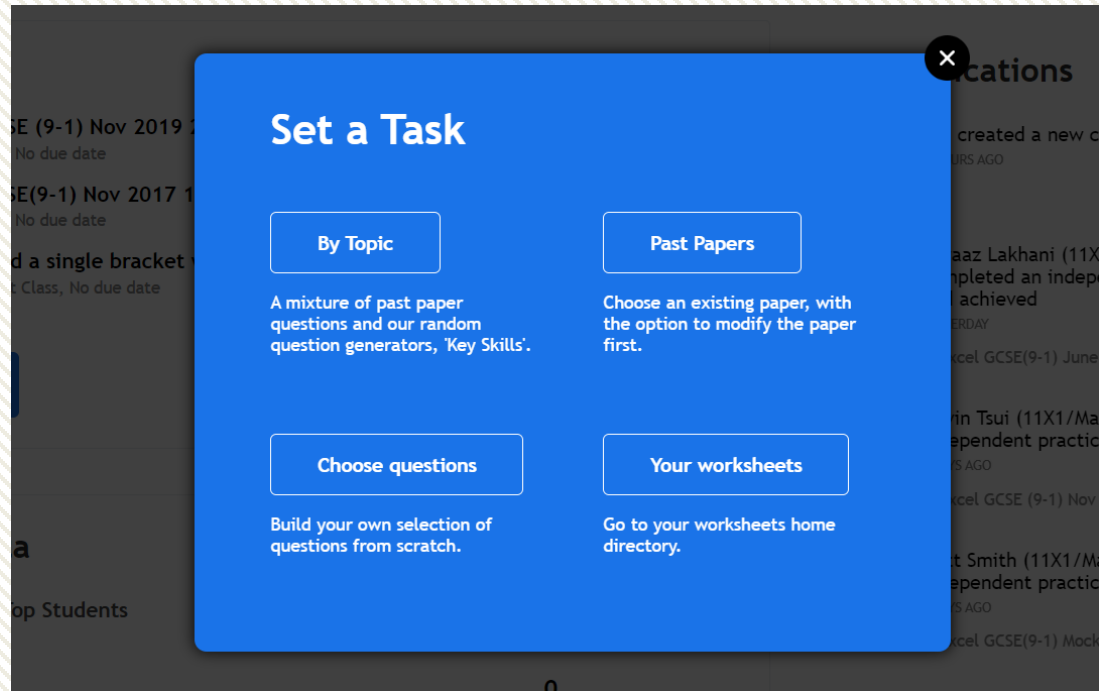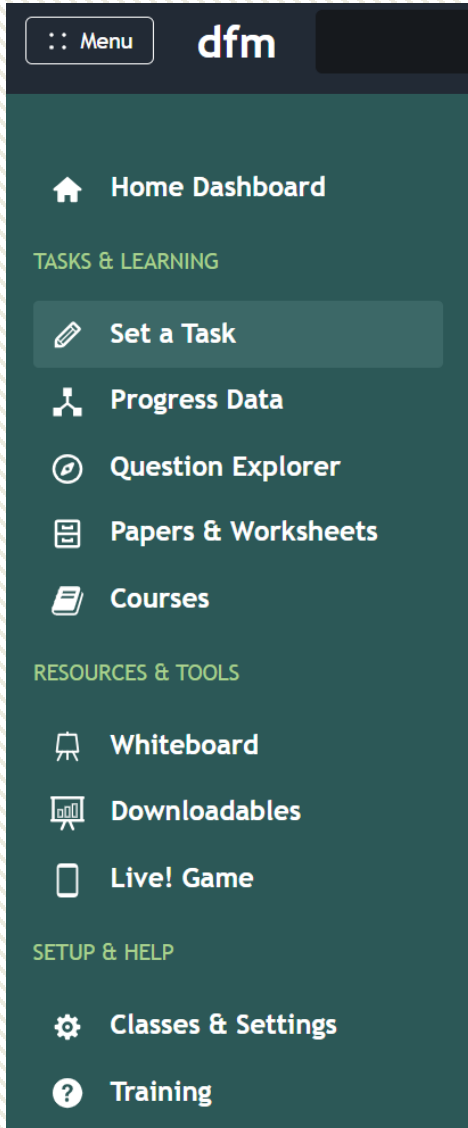
You'll be presented with different options for setting work, with explanatory text. Let's explore some of these...

Set a task

There are two main sources of questions on Dr Frost:

Key Skill Questions: these are randomly generated (and hence unlimited!) questions of a specific type. They target a single type of question within a skill with surface level variation between questions.

Exam questions: past papers questions from UK and overseas exam boards such as Edexcel, SQA, CEA, WJEC, NZQA, NESA etc.

'By Topic' allows you to select both Key Skill practice and/or exam practice. You can create a worksheet of fixed questions or set 'flexible tasks' (where students each get different question sets).

'Choose questions' allows you to create a worksheet of Key Skill and exam practice starting from a blank template. Select questions one by one to build a bespoke worksheet.
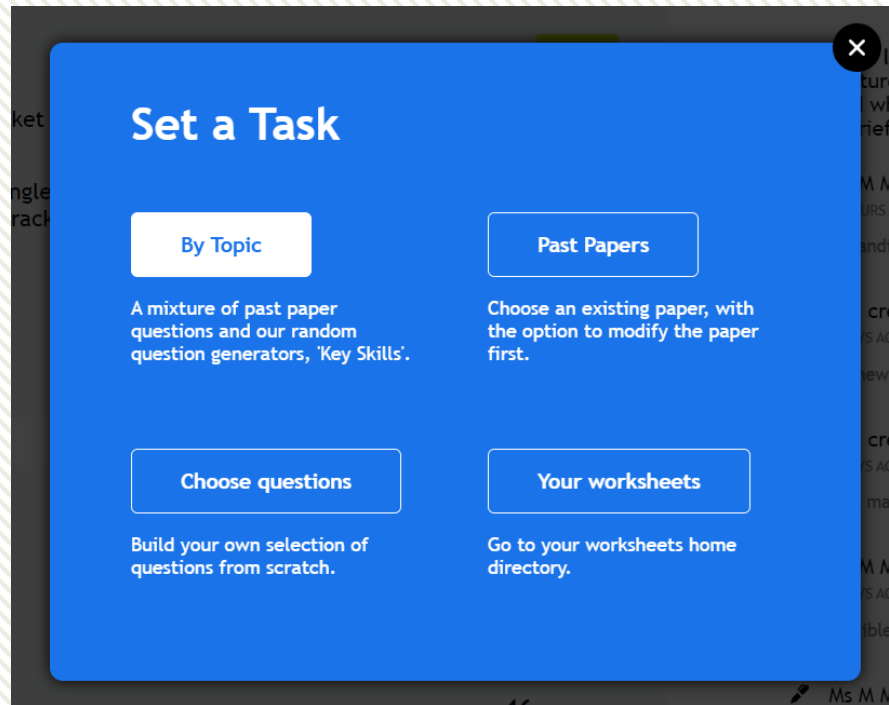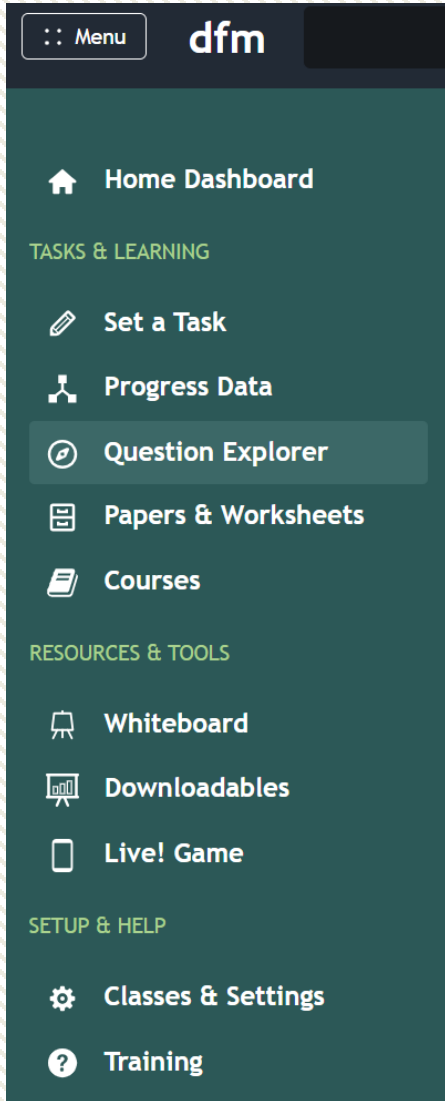
Set a Task

By Topic

A mixture of past paper questions and our random question generators, 'Key Skills'.

Past Papers

Choose an existing paper, with the option to modify the paper first.

Choose questions

Build your own selection of questions from scratch.

Your worksheets

Go to your worksheets home directory.

'Past Papers' allows you to set an exam paper as an online task. You can modify the questions, add Key Skill practice or generate a shadow paper.

'Your worksheets' allows you to set a task from a worksheet you have already created. You can also save tasks to your school's shared area.

Set a task: By Topic

Home Dashboard

TASKS & LEARNING

✏️ Set a Task

👥 Progress Data

🧭 Question Explorer

📑 Papers & Worksheets

📖 Courses

RESOURCES & TOOLS

🖼️ Whiteboard

📊 Downloadables

📱 Live! Game

SETUP & HELP

⚙️ Classes & Settings

❓ Training

You can access the Question Explorer using
Set a Task → By Topic or **Menu → Question Explorer**.

Set a Task

By Topic

A mixture of past paper questions and our random question generators, 'Key Skills'.

Past Papers

Choose an existing paper, with the option to modify the paper first.

Choose questions

Build your own selection of questions from scratch.

Your worksheets

Go to your worksheets home directory.

Set a task: By Topic

Menu | **dfm**

🔍

J Frost [23]

UK Curriculum By Course

⌄ **KS2**

⌄ **KS3/4**

⌄ **KS5**

Complete Skill List

Either browse skills by UK Curriculum or "By Course". Click the drop down to select the relevant key stage/age range. You will then be able to select the topic and skills you wish to set.

...election

...pics using the tree,
...ct a mixture of
...whole skills or the subskills
within them.

Set a Task

Generate Worksheet

Have a Go

Recommended for You

83 Expand a single bracket.

80 Collect like terms.

206 Use laws of indices for multiplying powers, dividing powers and raising a power to a power. Deal with a power of 0.

263 Know the relationship between the gradients of perpendicular lines.

345 Determine a function given its derivative and a point.

Mastering Skills

Each skill has a mastery level between 0 and 100. Getting to different thresholds will achieve 1, 2 or 3 bars of mastery at that skill.

Each skill consists of subskills (mostly Key Skills) of varying difficulties. To get to higher mastery at a skill, you not only need to get questions consistently correct; you need to also master subskills of higher difficulty. Suppose the difficulty within a skill varied from 1 to 4. You could get up to a mastery of 25/100 by answering difficulty 1 question, 50/100 by answering difficulty 2, and so on.

Set a task: By Topic

The first subskill is 'Exam Practice'. You can click '**Browse**' to see all exam questions on this skill.

::: Menu   dfm   🔍   J Frost [23] ⌄

UK Curriculum   By Course

⌄ **KS2**

⌄ **KS3/4**

⌄ Algebra   92 skills

- Algebraic Proofs
- Changing the Subject
- Curved Graphs
- Differentiation
- Expanding Brackets
- Factor Theorem and Remainder Theorem (FM only)
- Factorising
- Formulae and Simplifying Expressions
- Functions

Pressing the **Example** button on any Key Skill will generate an example question. Click the Refresh icon to get another example and see the level of surface variation.

83 **Expand a single bracket.**
Mastery: 33/100

OR NARROW DOWN		VIDEO	DIFFICULTY
☐ E83: Exam Practice: Expand a single bracket.	Browse	▦	1-4
☐ K83a: Expand a single bracket with an integer on the front.	Example	▦	1
☐ K83b: Expand a single bracket requiring simplification.	Example	▦	2
☐ K83c: Expand a single bracket with an algebraic term at the front.	Example	▦	2
☐ K83d: Expand two sets of single brackets and collect like terms.	Example	▦	3
☐ K83e: Expand two sets of single brackets where the second bracket has a negative coefficient.	Example	▦	3
☐ K83f: Expand a single bracket using index laws.	Example	▦	4

The video icon brings up a video showing a worked example. Key Skills videos are typically 2-4 minutes long.

↻ ⛶   ✕

K83a: Expand a single bracket with an integer on the front.

Expand

$$5(x + 1)$$

✏️ [   ]

Submit Answer

Set a task: By Topic

Check the boxes to select the subskills you wish to be included in the task. You can select a mixture of exam practice and Key Skill practice. You can select all the Key Skills in one go by checking the box next to the skill name.

:: Menu   dfm   [search]   M McDonagh ⌄

UK Curriculum   By Course

⌄ **KS2**

⌄ **KS3/4**

⌄ Algebra   92 skills

- Algebraic Proofs
- Changing the Subject
- Curved Graphs
- Differentiation
- Expanding Brackets
- Factor Theorem and Remainder Theorem (FM only)
- Factorising

☐ 179   Expand two brackets.
Mastery: 58/100

OR NARROW DOWN		VIDEO	DIFFICULTY	RECENT ACCURACY
☐ E179: Exam Practice: Expand two brackets.	Browse	▦	1-4	
☐ K179a: Expand two brackets in the form $(x-a)(x+a)$.	Example	▦	1	100%
☐ K179b: Expand two brackets in the form $(x \pm a)(x \pm b)$	Example	▦	1	100%
☑ K179c: Expand an expression in the form $(x+a)^2$.	Example	▦	2	67%
☐ K179d: Expand two brackets in the form $(ax+b)(cx+d)$.	Example	▦	2	100%
☑ K179e: Expand a pair of brackets containing up to three terms.	Example	▦	3	
☐ K179f: Expand expressions of the form $(ax+b)(cx+d) - (ex+f)(gx+h)$.	Example	▦	4	100%
☑ K179g: Expand double brackets with subsequent simplification required.	Example	▦	4	

Your selection

:: K83c   Expand a single bracket with an algebraic term at the front.   ✕

:: K83e   Expand two sets of single brackets where the second bracket has a negative coefficient.   ✕

[Set a Task]

[Generate Worksheet]

[Have a Go]

Note: if you wish to set **flexible questions** then you cannot select a mixture of Key Skill practice and exam practice.

Set a task: By Topic

Your selection will appear on the right. You can drag and change the order of the skills you have selected, and you can select subskills from additional topics using the topic tree to the left.

179 Expand two brackets.
Mastery: 58/100

OR NARROW DOWN		VIDEO	DIFFICULTY	RECENT ACCURACY
E179: Exam Practice: Expand two brackets.	Browse	▦	1-4	
K179a: Expand two brackets in the form $(x-a)(x+a)$.	Example	▦	1	100%
K179b: Expand two brackets in the form $(x \pm a)(x \pm b)$	Example	▦	1	100%
☑ K179c: Expand an expression in the form $(x+a)^2$.	Example	▦	2	67%
K179d: Expand two brackets in the form $(ax+b)(cx+d)$.	Example	▦	2	100%
☑ K179e: Expand a pair of brackets containing up to three terms.	Example	▦	3	
K179f: Expand expressions of the form $(ax+b)(cx+d)-(ex+f)(gx+h)$	Example	▦	4	100%
☑ K179g: Expand double brackets with subsequent simplification required.	Example	▦	4	

Your selection

:: K83c Expand a single bracket with an algebraic term at the front. ✕

:: K83e Expand two sets of single brackets where the second bracket has a negative coefficient. ✕

:: K179c Expand an ✕

[Set a Task]

[Generate Worksheet]

[Have a Go]

Set a task allows you to set the questions in your selection as a fixed set of questions, flexible questions, or a Live! Game.

Generate Worksheet allows to generate a fixed set of questions which you can save for later or set immediately. It is equivalent to **Set a task-> Fixed Questions**

Have a Go is equivalent to the 'Practise' button students will see here if working independently. It allows you to experience completing the questions as a student.

Set a task: By Topic- Fixed Questions

Set a Task

K83c: Expand a single bracket with an algebraic term at the front.
K83e: Expand two sets of single brackets where the second bracket has a negative coefficient.
K179c: Expand an expression in the form $(x + a)^2$.
K179e: Expand a pair of brackets containing up to three terms.
K179g: Expand double brackets with subsequent simplification required.

◉ **Fixed Questions**
Advantages: Everyone gets the same questions. Option to set as a formal assessment.

○ **Flexible Questions**
Advantages: More control over completion criteria, e.g. accuracy required. Differentiate by ability, with students advancing to harder Key Skills in your selection as they consistently get questions correct.

○ **Live! Game**
Intended for a classroom environment. Students see the questions on your own screen and play along on their mobile/tablet device.

Continue

Set a task -> Fixed questions will require you to generate a worksheet before setting the task. Use the drop down to select the number of questions you require for each subskill, and whether you wish the skills to interleave or follow on from each other.

Generate Worksheet

K83c: Expand a single bracket with an algebraic term at the front.
K83e: Expand two sets of single brackets where the second bracket has a negative coefficient.
K179c: Expand an expression in the form $(x + a)^2$.
K179e: Expand a pair of brackets containing up to three terms.
K179g: Expand double brackets with subsequent simplification required.

This facility, using the skills you selected, allows you to create a fixed set of questions that you can either **set as a homework/assessment** or **export to Word** as a worksheet.

Num Questions: [3 of each subskill (15 total) ▼]

Interleave Skills: [No ▼] ?

Generate

Set a task: By Topic- Fixed Questions

Review the questions which have been generated and use the refresh icon if necessary. You can drag the questions to change their order.

Add an exam question or further Key Skill questions by pressing the plus sign.

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Set a task: By Topic- Fixed Questions

You must save the worksheet before you can 'Set a Task'. The default option will save the worksheet in your teacher directory. You can click on the links within 'Location' and save to a folder within your own directory or click on the name of your school to save in the shared or restricted areas.

Press **'Download'** to export to a Microsoft Word document. Answers are provided.

Set a task: By Topic- Fixed Questions

After saving the worksheet and pressing **'Set a Task'** you will be presented with the option to set a Normal Task or a Live! Task.

To set the task as a homework, classwork or assessment, select 'Normal Task'.

Set a task: By Topic- Fixed Questions

Set a task for a single class, multiple classes, or individuals.

The custom label is the name of the task as it appears on the student's dashboard. If this is left empty then we'll use the names of the skills involved.

You can assign a due date and/or schedule the task to be released on a certain date and time.

The task can be completed as a homework/classwork or as an assessment.

If the task is set as an **assessment**, after students submit their answer, they receive the message "Your answer has been recorded". They will not know which answers are correct/incorrect until the specified due date, and the student **will not be able to change their answers** once they have submitted a response.

Set a task: By Topic- Fixed Questions

Set a Task

Set task for: Click to choose ▾

Worksheet: Expanding Brackets

Custom Label: (optional) [?]

Due: ☑ No Due Date

Set: Immediately ▾

○ Set as **a Homework/Classwork**
Students get instant feedback after submitting each answer.

○ Set as an **Assessment**
Students do not see the answers until the due date specified by you. Students can not redo the assessment unless it is set again by the teacher.

Set

Options

Warn when Wrong:	Yes ▾	[?]
Prevent Reattempts:	Yes ▾	[?]
Require Working:	No ▾	[?]
Require Feedback:	No ▾	[?]
Require Videos:	No ▾	[?]
Time Limit:	None ▾	
Accuracy measure:	Each question worth the same ▾	[?]

Warn when wrong: When set to Yes, students will be warned once per question if their answer is incorrect. Excludes multiple choice questions.

Prevent reattempts: When set to Yes, students can only do a homework once, without trying for an improved mark. If set to No and you are setting a **fixed question task,** the students will only need to reattempt incorrect questions. Note, students will not get the explanation/correct answer for incorrectly answered questions. This is to prevent students knowing the answers for subsequent attempts.

Require Working: When set to Yes, students must use the mini-whiteboard next to the question display to provide workings. Optional means the working will be recorded if provided.

Require Feedback: After students have answered a question, they have a box in which they can leave written reflections on the question for the teacher.

Require videos: When set to Yes, students must watch the video for each selected key skill.

Time limit: When a time limit is chosen, the task will close after the elapsed time. The task should be completed in one sitting if a time limit is given.

Accuracy measure: selecting 'Use Exam marking' will allocate the student the number of marks the question is worth. Note that this option is only available when all questions are exam questions.

Set a task: By Topic- Flexible Questions

☐ 179 **Expand two brackets.**

Mastery: 58/100

OR NARROW DOWN		VIDEO	DIFFICULTY	RECENT ACCURACY
☐ E179: Exam Practice: Expand two brackets.	Browse	🎞	1-4	
☐ K179a: Expand two brackets in the form $(x-a)(x+a)$.	Example	🎞	1	100%
☐ K179b: Expand two brackets in the form $(x \pm a)(x \pm b)$.	Example	🎞	1	100%
☑ K179c: Expand an expression in the form $(x+a)^2$.	Example	🎞	2	67%
☐ K179d: Expand t		🎞	2	100%
☑ K179e: Expand a		🎞	3	
☐ K179f: Expand e		🎞	4	100%
☑ K179g: Expand d		🎞	4	

Your selection

:: K83c   Expand a single bracket with an algebraic term at the front.   ✕

:: K83e   Expand two sets of single brackets where the second bracket has a negative coefficient.   ✕

:: K179c   Expand an   ✕

Set a Task ✕

Set a Task

K178c: Factorise by taking a common algebraic factor out involving index laws.

○ **Fixed Questions**
Advantages: Everyone gets the same questions. Option to set as a formal assessment.

● **Flexible Questions**
Advantages: More control over completion criteria, e.g. accuracy required. Differentiate by ability, with students advancing to harder Key Skills in your selection as they consistently get questions correct.

○ **Live! Game**
Intended for a classroom environment. Students see the questions on your own screen and play along on their mobile/tablet device.

Continue

[Set a Task]

[Generate Worksheet]

[Have a Go]

To set flexible questions, select the subskills you require and then press **Set a task -> Flexible questions'.** Remember you can select either Key Skill practice, or exam practice, but not both.

Tip: Make use of the example button and the refresh icon when selecting the Key Skills so you are confident you have made the right selection.

Set a task: By Topic- Flexible Questions

'Fixed number of questions' means each student will get the same number of questions.
- **with differentiation** means the system will increase the difficulty of the questions as the student demonstrates success with each subskill. If a student struggles gets a subskill incorrect, they will be given questions on this subskill until they get a correct answer.

- **with interleaving** means the system will rotate the subskills so the student has equal exposure to each type of question.

'Accuracy required to finish' means some students will answer more questions than others. It is recommended to choose this option if you want to ensure the student answers a minimum number of questions on each subskill and can demonstrate consistency getting their answers correct.

Set a Task

Set task for: **Click to choose**

Skills: **K178c Factorise ...**

Custom Label: (optional)

Due: ☑ No Due Date

Set: Immediately

◉ **Fixed number** of questions
Either the system differentiates between the subskills in your selection (giving them harder or easier questions based on their changing mastery), or interleaving between all the skills in your selection.
10 questions with differentiation

○ **Accuracy** required to finish
We'll interleave between the subskills within your selection. Students need to achieve the required accuracy at each subskill.

Options

Warn when Wrong: Yes

Prevent Reattempts: Yes

Require Working: No

Require Feedback: No

Require Videos: No

Time Limit: None

Hide skill names: No

Set

Set a task: By Topic- Flexible Questions

Important Prevent reattempts: When set to Yes, students can only do a homework once, without subsequently trying for an improved mark. If set to No and you are setting a **flexible question task**, students will be shown the explanation/correct answer for incorrectly answered questions. When the student reattempts the task, they will need to complete the full task again (not just the incorrect questions). The system will give a new question set based on the same skill selection.

Set a task: Choose questions

Click the top left menu and choose **'Set a task'-> Choose questions.** Alternatively click the **Set a Task** button on your home dashboard.

Set a Task

By Topic

A mixture of past paper questions and our random question generators, 'Key Skills'.

Past Papers

Choose an existing paper, with the option to modify the paper first.

Choose questions

Build your own selection of questions from scratch.

Your worksheets

Go to your worksheets home directory.
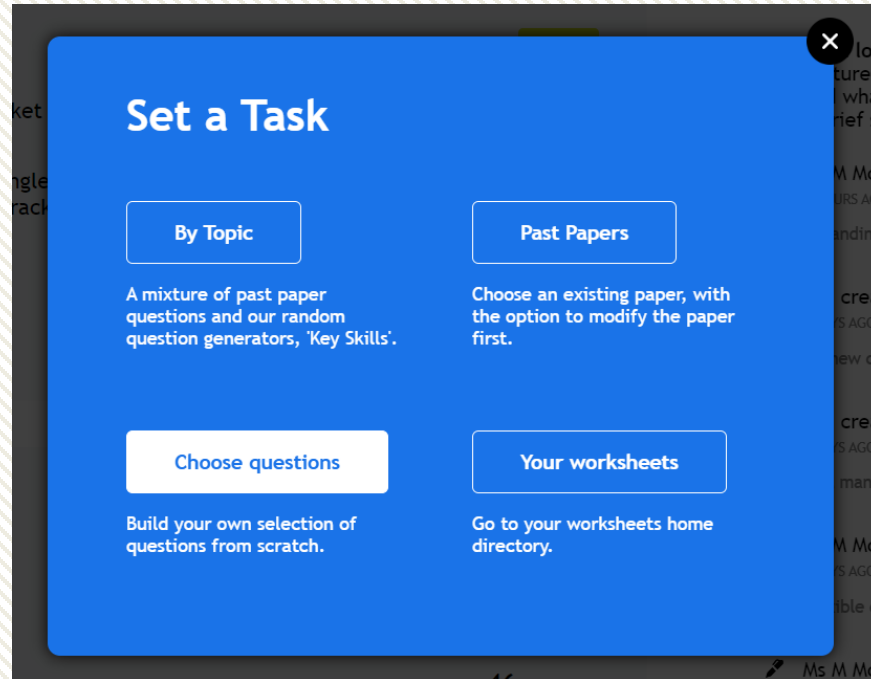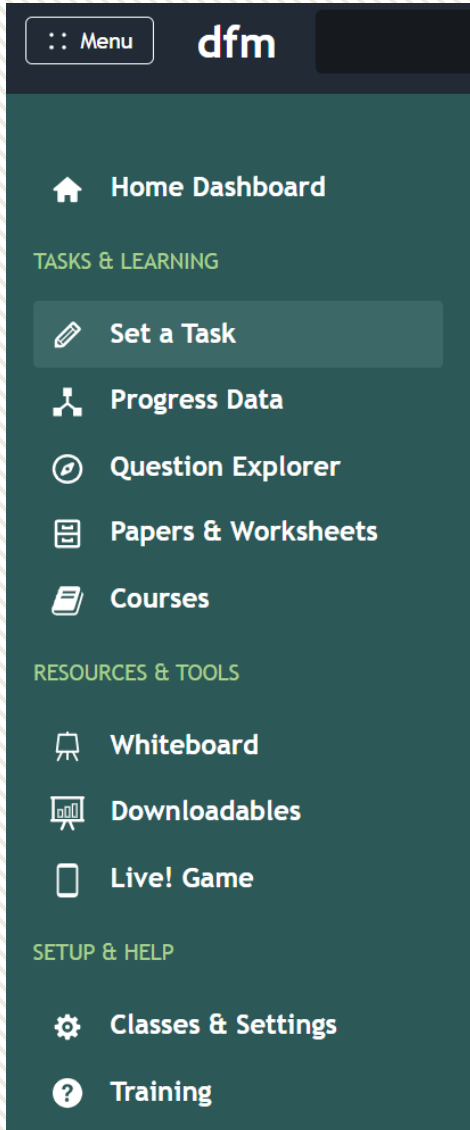
You can create a custom selection of questions, mixing past paper exam questions and randomly generated Key Skill questions. We call such a collection a **worksheet**. Worksheets can either be set to students as an online task, exported to Word, or played as a 'Live!' game.

Set a task: Choose questions

The question template allows you to add as many exam questions and/or Key Skill questions as you wish. Click inside the box to staring choosing an exam question.

Add a past paper **exam question** to your worksheet.

Add a **Key Skill** question to your worksheet. Recall that these are randomly generated questions on very specific question types.

Set a task: Choose questions

You will see this box appear when choosing an **exam question**.

Use the 'Filter by Topic' drop down to browse **by topic** or **by course**.

Filter questions to your chosen **exam board**.

Choose the **difficulty level** of the questions.

316 Rationalise ...   Exam Questions Only   Difficulty: 2   filter by keywords

stion

[Edexcel IGCSE Jan 2018 3H Q20b]
Given that a is a prime number,

simplify $\dfrac{5\sqrt{a}+a}{10\sqrt{a}}$ ...

Difficulty: 1 2 3 4
Author: Edexcel

[CCEA GCSE Jan 2020 M8 P1 Q11a]
Rationalise the denominator of $\dfrac{28}{\sqrt{7}}$

Difficulty: 1 2 3 4
Author: CCEA

[Edexcel IGCSE(9-1) June 2018 2HR Q17b] Show that $\dfrac{\sqrt{20}+\sqrt{80}}{\sqrt{3}}$ ...

Difficulty: 1 2 3 4
Author: Edexcel

[OCR GCSE(9-1) Nov 2019 5H Q13b] Simplify $\dfrac{20}{\sqrt{5}}$ fully by rationalisin...

[Edexcel IGCSE(9-1) June 2018 2HR Q17b]

Show that

$$\frac{\sqrt{20}+\sqrt{80}}{\sqrt{3}}$$

can be expressed in the form $\sqrt{a}$ where a is an integer.

(3 marks)

Use this question   Use all parts of this question

If the question has multiple parts, you have the option to select **"Use all parts of this question".**

Set a task: Choose questions

← No saved location
New Worksheet

Set as Task | Save | Save As | Download

View   **Edit**   Try as a stude ⌄

Question 1 [1][2][3][4] ×

[Edexcel IGCSE(9-1) June 2018 2HR Q17b]

Show that

$$\frac{\sqrt{20} + \sqrt{80}}{\sqrt{3}}$$

can be expressed in the form $\sqrt{a}$ where a is an integer.

Question 2 ×

Click to generate a random Key Skill question.

➕
EXAM QUESTION

➕
KEY SKILL QUESTION

If you click a blank Key Skill question box, you'll be required to search for a Key Skill. You can use the **Regenerate above** button to randomly generate a new question. Once you're happy with it, press **Use this**.

×

K317c Rationalis... ⌄

Rationalise the denominator of

$$\frac{5}{\sqrt{7} + \sqrt{5}}$$

Give your answer in its simplest form.

✎ [   ]

Regenerate above   **Use this**

Set a task: Choose questions

Save the worksheet before you set it. You can set it as an online task, export it to Word, or play as a 'Live!' game.

'Try as a student' allows you to answer the questions as if you were a student.

Question 1 `1` `2` `3` `4`

Rationalise the denominator of

$$\frac{2}{\sqrt{13}}$$

Question 2 `1` `2` `3` `4`

Rationalise the denominator of

$$\frac{5}{\sqrt{11}}$$

Question 3 `1` `2` `3` `4`

Rationalise the denominator of

$$\frac{8}{\sqrt{11} + \sqrt{2}}$$

Give your answer in its simplest form.

Question 4 `1` `2` `3` `4`

[Edexcel IGCSE(9-1) June 2018 2HR Q17a Edited]

Use algebra to write $0.4\dot{3}\dot{6}$ as a fraction in its simplest form.

(2 marks)

Question 5 `1` `2` `3` `4`

[Edexcel IGCSE(9-1) June 2018 2HR

can be expressed in the form $\sqrt{a}$ where a is an integer.

Question 6 `1` `2` `3` `4`

[Edexcel IGCSE Jan 2018 3H Q20a]

$\sqrt{50} + \sqrt{128} - \sqrt{200} = n\sqrt{2}$ where n is an integer.

Find the value of n.

(3 marks)

$n =$ [____]

Question 7 `1` `2` `3` `4`

[Edexcel IGCSE Jan 2018 3H Q20b]

Given that a is a prime number, simplify

$$\frac{5\sqrt{a} + a}{10\sqrt{a}}$$

Give your answer in the form $x + y\sqrt{a}$, where x and y are fractions.

(2 marks)

Question 8 `1` `2` `3` `4`

[Edexcel IGCSE Jan2012-3H Q19]

Show that

$$\frac{\sqrt{3} + \sqrt{27}}{\sqrt{2}}$$

can be expressed in the form $\sqrt{k}$ where k is an integer. State the value of k.

+

EXAM QUESTION

+

KEY SKILL QUESTION

Set a task: Choose questions

When you set the task, you will be given the same options as **Set a task-> by topic -> fixed questions.**

Set a Task

Set task for: **Click to choose** ▼

Worksheet: Expanding Brackets

Custom Label: (optional) [?]

Due: ☑ No Due Date

Set: Immediately ▼

● Set as **a Homework/Classwork**
Students get instant feedback after submitting each answer.

○ Set as an **Assessment**
Students do not see the answers until the due date specified by you. Students can not redo the assessment unless it is set again by the teacher.

Set

Options

Warn when Wrong: Yes ▼ [?]

Prevent Reattempts: Yes ▼ [?]

Require Working: No ▼ [?]

Require Feedback: No ▼ [?]

Require Videos: No ▼ [?]

Time Limit: None ▼

Accuracy measure: Each question worth the same ▼ [?]

Set a task for a single class, multiple classes, or individuals.

The custom label is the name of the task as it appears on the student's dashboard. If this is left empty then we'll use the names of the skills involved.

You can assign a due date and/or schedule the task to be released on a certain date and time.

The task can be completed as a homework/classwork or as an assessment.

If the task is set as an **assessment**, after students submit their answer, they receive the message "Your answer has been recorded". They will not know which answers are correct/incorrect until the specified due date, and the student **will not be able to change their answers** once they have submitted a response.

Set a task: Choose Questions

Set a Task

Set task for: **Click to choose** ⌄

Worksheet: Expanding Brackets

Custom Label: (optional) [?]

Due: ☑ No Due Date

Set: Immediately ⌄

◉ Set as **a Homework/Classroom**
Students get instant feedback after submitting each answer.

○ Set as an **Assessment**
Students do not see the answers until the due date specified by you. Students can not redo the assessment unless it is set again by the teacher.

Set

Options

Warn when Wrong: Yes ⌄ [?]

Prevent Reattempts: Yes ⌄ [?]

Require Working: No ⌄ [?]

Require Feedback: No ⌄ [?]

Require Videos: No ⌄ [?]

Time Limit: None ⌄

Accuracy measure: Each question worth the same ⌄ [?]

Warn when wrong: When set to Yes, students will be warned once per question if their answer is incorrect. Excludes multiple choice questions.

Prevent reattempts: When set to Yes, students can only do a homework once, without trying for an improved mark. If set to No, they student will only need to reattempt incorrect questions. Note, students will not get the explanation/correct answer for incorrectly answered questions. This is to prevent students knowing the answers for subsequent attempts.

Require Working: When set to Yes, students must use the mini-whiteboard next to the question display to provide workings. Optional means the working will be recorded if provided.

Require Feedback: After students have answered a question, they have a box in which they can leave written reflections on the question for the teacher.

Require videos: When set to Yes, students must watch the video for each selected key skill.

Time limit: When a time limit is chosen, the task will close after the elapsed time. The task should be completed in one sitting if a time limit is given.

Accuracy measure: selecting 'Use Exam marking' will allocate the student the number of marks the question is worth. Note that this option is only available when all questions are exam questions.

Set a task: past papers

Go to **Menu → Set a Task → Past Papers**.

Set a task: past papers

Choose an exam board and select a past paper.

Set a task: past papers

:: Menu   **dfm**   🔍   J Frost 23 ⌄

/ DFM / Past Papers / Pearson Edexcel / GCSE 9-1 Foundation
← **Edexcel GCSE(9-1) June 2018 3F**

Set as Task   Save   Save As   Download   ⛶

View   Edit

Or click **'Edit'** to modify the paper before setting.

More Options ⌄

Click 'More options' to **try as a student**. Note that when a student completes past paper practice as an online task, they will get feedback as correct/incorrect and they will be shown the markscheme (if prevent reattempts is set to 'yes'). The student will have access to video help and will be able to answer the questions in any order.

Question 8   1 **2** 3 4

[Edexcel GCSE(9-1) June 2018 3F Q5b Edited]

Here are four digits.

8   2   1   6

Put one of these digits in each box to give the smallest possible answer to the sum.
You must use each digit only once.

[ ][ ] + [ ][ ]

(1 mark)

✏ The first number is: [   ]

✏ The second number is: [   ]

Submit Answer

Report Error   Edit

Set a task: past papers

/ DFM / Past Papers / Pearson Edexcel / GCSE 9-1 Foundation
Edexcel GCSE(9-1) June 2018 3F

Set as Task   **Save**   **Save As**   **Download**   ⛶

View   *Edit*

Question 1   ×

[Edexcel GCSE   *18 3F Q3]*

Write $\frac{9}{10}$ as a   ect to the

(1 mark)

In **'Edit' mode, y**ou can now:
- **Reorder questions** by dragging the question boxes.
- **Delete questions** using the × in the top right corner of each box.
- **Replace questions** by clicking on the question within a box.
- **Add questions** by scrolling down and using the + buttons at the end of the worksheet.

Once finished, use the **Save As** button to save your modified copy, then use the **Set to Students** button as before.

Q4a1]

Here are the first 4 terms of a sequence.

   2   9   16   23

Write down the next term in the sequence.

(1 mark)

Question 5 ☐**2**☐**4**   ×

[Edexcel GCSE(9-1) June 2018 3F Q4aii Edited]

Here are the first 4 terms of a sequence.

   2   9   16   23

Explain how to find the next term in the sequence.

(1 mark)

Question 6 ☐**2**☐**4**   ×

[Edexcel GCSE(9-1) June 2018 3F Q4b]

Here are the first 4 terms of a sequence.

   2   9   16   23

Work out the 10th term of the sequence.

(1 mark)

Question 7 **1**☐**3**☐**4**   ×

[Edexcel GCSE(9-1) June 2018 3F Q5a]

Here are four digits.

   7   3   4   9

Use three of these digits to write down the largest possible 3-digit number.

(1 mark)

Question 8 **1**☐**3**☐**4**   ×

[Edexcel GCSE(9-1) June 2018 3F Q5b Edited]

Here are four digits.

   8   2   1   6

Put one of these digits in each box to give the smallest possible answer to the sum.
You must use each digit only once.

Set a task: past papers

Recall, if a worksheet contains **all exam questions,** then the 'Accuracy Measure' drop down will be available to **'Use exam marking'.** If 'Require working' is set to Yes, then you will be able to review written solutions and award method marks. For details on how to do this, please see page 67.

Set a Task

Set task for: **Click to choose** ▾

Worksheet: CCEA GCSE Summer 2021 Foundation M6 Paper 1

Custom Label: (optional) ?

Due: ☑ No Due Date

Set: Immediately ▾

◉ Set as **a Homework/Classwork**
Students get instant feedback after submitting each answer.

○ Set as an **Assessment**
Students do not see the answers until the due date specified by you. Students can not redo the assessment unless it is set again by the teacher.

Set

Options

Warn when Wrong: Yes ▾ ?

Prevent Reattempts: Yes ▾ ?

Require Working: Yes ▾ ?

Require Feedback: No ▾ ?

Require Videos: No ▾ ?

Time Limit: None ▾

Accuracy measure: Each question worth the same ▾ ?
- Each question worth the same
- Use exam marking

The student view

Each class you set up also has an associated **'demo account'**. Any work you set to the students in your class will also be set to the demo account. This enables you to see what the experience is like for a student.

On the top account menu, choose 'View As Student'.
You can also access this when viewing a class within Settings, under 'Class Options'.

Select a class. You will now be logged in as that demo account and will need to log off (and back in) if you wish to return to your own account.

The student view

The student view

Assigned Work

My Progress

Leaderboards

← **Expand and simplify**   Attempt 1/1 ▾   **Start Attempt**

Use the **Start Attempt** button above to start this task.

Click 'Start Attempt'.

You're ready to go! Consider watching these videos before starting.

K80d Collect like terms without powers.
2 mins

K83a Expand a single bracket with an integer on the front.
2 mins

K83c Expand a single bracket with an algebraic term at the front.
2 mins

K179a Expand two brackets in the

Start

The option to watch videos related to the skills in the task will appear.

If you have selected '**Require videos**' then the student will need to watch the full video before they can press 'Start'.

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The student view

Video help is accessible within the task.

dfm

K80d: Collect like terms without powers.

▦ Watch Worked Example

✎ ─ ○ ⌒ ◗ T ✕

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 | Q19 |

COMPLETION
0%

Students can record working on the side whiteboard by clicking the pen icon.

Simplify

$$2p - 5q + 7p + 4$$

✎ $9p - 5q + 4$

Submit Answer

$$2p + 7p - 5q + 4$$

Students type their answer in the box and can use the keypad below to input their answers using correct mathematical notation.
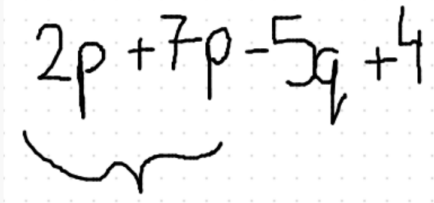
x	y	e	π		7	8	9	$\square/\square$		⌫		Main
$\sqrt{\square}$	$\sqrt[n]{\square}$	a^2	$a^{\square}$		4	5	6	$\times$		←		ABC
$<$	$>$	$\leq$	$\geq$		1	2	3	$-$		→		Funcs
$($	$)$	$!$	θ		0	.	$=$	$+$		↵		Symbs

The student view

dfm

Your mastery for this skill has increased.
83 Expand a single bracket.

[▭] **Watch Worked Example**

✏

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 | Q19 |

COMPLETION
42%

Expand

$$3x(10x + 1)$$

✏ $30x^2 + 3x$

Submit Answer

You can optionally leave a comment for your teacher about this question/your answer. Press Alt+Equals to insert mathematical expressions.

Send

✔ **Correct**

The answer is $30x^2 + 3x$

① Multiply all terms in the bracket by $3x$

$$3x(10x + 1) = 30x^2 + 3x$$

Next Question   Continue Later

The student can press 'Continue Later' if required.

Once they have submitted their answer, a comment box appears for the student to leave feedback.

The student view

At the end of the task the student will have earned practice points and their mastery progression with the skills in the task will be recorded. The student can review their answers and reattempt the task, if allowed.

The student view

Assigned Work

My Progress

Leaderboards

← **Expand and simplify** [Attempt 1/1 ▾] **Re-attempt Task**

CORRECT ANSWER:
See full markscheme
$6p - 30$

STUDENT ANSWER:
Report Error
$6p - 30$

WORKING

Write a new comment

> The student can click Re-attempt Task.

Question 5
4 secs
K83a Expand a single bracket with an integer on the front. Review

STUDENT ANSWER:
Report Error
$4x + 1$

WORKING

Expand
$$4(x + 1)$$

Write a new comment

> The student can write comments after they have completed the task, if they prefer. They can also respond to a comment you have written when reviewing a task.

The student view

Question 5
4 secs

K83a Expand a single bracket with an integer on the front. **Review**

STUDENT ANSWER:
Report Error

$4x + 1$

WORKING

Expand

$$4(x + 1)$$

Write a new comment

Alternatively, the student can click 'Review' and complete further practice on the relevant Key Skills/Exam skills. They should make note of the code e.g K83a to ensure they select the right subskill to practise.

☐ **83 Expand a single bracket.**
Mastery: 25/100

OR NARROW DOWN	VIDEO	DIFFICULTY	RECENT ACCURACY
☐ E83: Exam Practice: Expand a single bracket.	Example	1-4	
☑ K83a: Expand a single bracket with an integer on the front.	Example	1	33%
☐ K83b: Expand a single bracket requiring simplification.	Example	2	
☐ K83c: Expand a single bracket with an algebraic term at the front.	Example	2	100%
☐ K83d: Expand two sets of single brackets and collect like terms.	Example	3	100%
☐ K83e: Expand two sets of single brackets where the second bracket has a negative coefficient.	Example	4	

Your selection

:: K83a   Expand a single bracket with an integer on the front.   ✕

Practise

Live! Game

Progress data for an assigned task

To review an assigned task, use the top left **Menu -> Progress Data.**

Alternatively, click 'View Student Progress' on the dashboard.

Progress data for an assigned task

Select a class from the drop-down menu and click on the task you want to review.

Tasks
- List
- Marksheet

Student Progress
Certificates
Leaderboards
Feedback

Assigned Tasks

| Choose students/classes ▾ | 20/8/2022 | to | 23/8/2023 |

TASK	SET DATE	DUE DATE	COMPLETED	AVG
Expand and simplify All of test Homework	Aug 16th	Aug 17th 9:30am	1/2	62%
Expanding Brackets All of test Homework	Aug 15th	None	0/2	75%
Flexible expand single bracket All of test Key Skill Homework	Aug 10th	Aug 17th 9:30am	0/3	
K83d Expand two sets of single brackets and collect like terms, K83e All of test Key Skill Homework	Aug 9th	None	0/3	100%
Y8 Expand and simplify All of test Homework	Aug 9th	Aug 17th 10:00am	0/3	100%
Surds practice All of test Key Skill Homework	Jul 18th	None	1/3	30%
Expand with exam extension				

The average percentage of correctly answered questions is indicated. It does not take into account unanswered questions.

Full Breakdown

Cells with an F indicate feedback from the student or teacher has been recorded.

Cells with a W indicate the student has written working.

An orange tick indicates the student has reattempted the task and been successful on a subsequent attempt.

A brown/orange tick indicates the student got the correct answer after they received a 'warn when wrong' message.

Full Breakdown

Click on an individual to review their responses, including their previous attempts, and to leave feedback.

Full Breakdown

← **Rleot Uneqnvk**
Algebra review

Attempt 1/2 ▾

Un-assign Task | **Mark as Incomplete** | **Make Student Redo**

The student will receive an email if you click 'Make student redo'.

Question 3
14 mins ✗

K79d Substitution with negative numbers. **Review**

CORRECT ANSWER:
See full markscheme

$P = 20$

STUDENT ANSWER:
Report Error

$P = 116$

[Edexcel IGCSE(9-1) Jan 2019(R) 2F Q11d]

$P = 3t^2 + 7t$

Work out the value of P when $t = -4$

(2 marks)

Write a new comment

Leave feedback to an individual or send the same feedback to all students with the incorrect answer.

Ms M McDonagh

You have....

☑ Use feedback for all who got this question wrong.

Submit

Question 4
10 mins ✓

CORRECT ANSWER:

8.66 miles

STUDENT ANSWER:
Report Error

8.66 miles

[Edexcel GCSE Nov-2006-4I Q25a]

When you are h feet above sea level, you can see d miles to the horizon, where

$$d = \sqrt{\frac{3h}{2}}$$

When you are 50 feet above sea level, how many miles can you see to the horizon? Give your answer correct to 3 significant figures.

Write a new comment

Update marks using exam marking

To award method marks when you have set a task to 'use exam marking', click on any cell where the student has been awarded 0 marks.

Click on the score and use the drop down to update to the appropriate number of marks.

If written, you will see the student's working here.

'By Topic' view

The 'By Topic' view shows each student's progress with the associated Exam Skills/ Key Skills within the task. The subskills are ordered so that those appearing on the most left are the worst answered across the class.

Algebra review
All of 7HB

Full Breakdown   **By Topic**   By Question

	E80 Collect like terms. 35% correct	E83 Expand a single bracket. 35% correct	E81 Multiply single algebraic terms. 50% correct	K82b Divide algebraic terms with powers. 50% correct	K79d Substitution with negative numbers. 71% correct	E84 Form algebraic expressions from context. 78% correct	K80d Collect like terms without powers. 94% correct	E79 Substitute values into more general algebraic expressions. 95% correct
Ei, Xuihbb View Attempts (3)	0/1	0/1	1/1	2/3	1/1	1/1	2/2	2/2
Wfhvwfk, Epxlg View Attempts (1)	0/1	0/1	0/1	2/3	0/1	0/1	2/2	2/2
Bowmrbq, Taswadd View Attempts (1)	0/1	0/1	0/1	0/3	0/1	0/1	2/2	2/2
Lkpaq, Xqrcvjj View Attempts (1)	1/1	1/1	0/1	2/3	1/1	1/1	2/2	2/2
Mjmsvk, Lmofyy View Attempts (4)	0/4	0/4	0/3	2/5	1/1	1/1	2/2	2/2
Adryhvo, Slrot View Attempts (2)	1/2	1/2	0/2	2/6	1/2	1/1	2/2	2/2
Wamykdb, Vjdsadjc View Attempts (1)	0/1	0/1	1/1	2/3	1/1	1/1	2/2	2/2

You can use the code for the Exam Skill/ Key Skill to set follow up tasks.

'By Question' view

The 'By Question' view shows the percentage of students who got the answer correct and all the incorrect answers submitted. It is anonymous and can be used to review misconceptions with the class.

:: Menu   **dfm**   🔍   M McDonagh ⌄

Tasks

List

Marksheet

Student Progress

Certificates

Leaderboards

Feedback

← **Algebra review**
   All of 7HB   Full Breakdown   By Topic   **By Question**   ↻ 💾 ✏️ 🗑️

Question 2

CORRECT ANSWER:
See full markscheme

1

STUDENT ANSWERS:
Report Error

| ✓ 100% |
| 1 |

[WJEC GCSE Autumn 2018 F1 Q14c, Autumn 2018 I1 Q3c]

Calculate the value of $5f + 3g$ when $f = -4$ and $g = 7$.

(2 marks)

Question 3

K79d Substitution with negative
numbers. Review

CORRECT ANSWER:
See full markscheme

$P = 20$

STUDENT ANSWERS:
Report Error

| ✓ 71% |
| $P = 20$ |
| ✗ 11% |
| $P = -76$ |
| ✗ 6% |
| $P = 116$ |
| ✗ 3% |
| $P = 10$ |

[Edexcel IGCSE(9-1) Jan 2019(R) 2F Q11d]

$P = 3t^2 + 7t$

Work out the value of P when $t = -4$

(2 marks)

Send feedback for incorrect answers

Send a feedback comment to all the students with an incorrect response.

Dr Frost Learning is a registered charity
in England and Wales (no 1194954)

'By Question' view

Algebra review
All of 7HB

Full Breakdown   By Topic   **By Question**

Question 5

K80d Collect like terms without powers. **Review**

CORRECT ANSWER:
See full markscheme

$7g - 2f$

STUDENT ANSWERS:
Report Error

✓ 74%
$7g - 2f$

✓ 10%
$-2f + 7g$

✓ 3%
$7g + -2f$

✗ 3%
$(10g - 2f) - 3g$

✗ 3%
$7g - 8f$

✗ 3%
$13g - 8f$

✗ 3%
g

[WJEC GCSE Autumn 2016 I1 Q4b]

Simplify the expression $10g - 5f - 3g + 3f$

(2 marks)

Send feedback for incorrect answers

Algebraically equivalent answers will be recorded as correct.

Generate the QLA for a task

Press the save icon to export to Excel or generate the Question Level Analysis (QLA) for the task.

Generate the QLA for a task

The QLA is generated for each individual student. The student can then use the associated codes to practice the skills requiring further review. The easiest way for students to do this is by using the search bar.

:: Menu   dfm   k82b   🔍

Skills (1)   ✕

KS3/4 → Algebra
Formulae and Simplifying Expressions
82   Divide single algebraic terms.

E82 - Exam Practice: Divide single algebraic terms.   🧭 Explore

K82a - Divide algebraic terms.   🧭 Explore

K82b - Divide algebraic terms with powers.   🧭 Explore

Rasnaam Belludi

Algebra review

Question	Skills	Score		
Q1	E79 Substitute values into more general algebraic expressions. K79c Substitution with two variables.		1 /	1
Q2	E79 Substitute values into more general algebraic expressions.		1 /	1
Q3	E79 Substitute values into more general algebraic expressions. K79d Substitution with negative numbers.		0 /	1
Q4	E79 Substitute values into more general algebraic expressions.		1 /	1
Q5	E80 Collect like terms. K80d Collect like terms without powers.		1 /	1
Q6	E80 Collect like terms. E83 Expand a single bracket.		0 /	1
Q7	E80 Collect like terms. K80d Collect like terms without powers.		1 /	1
Q8	E81 Multiply single algebraic terms.		1 /	1
Q9	E81 Multiply single algebraic terms.		0 /	1
Q10	E81 Multiply single algebraic terms. K81a Multiply algebraic terms.		1 /	1
Q11	E82 Divide single algebraic terms. K82b Divide algebraic terms with powers.		0 /	1
Q12	E82 Divide single algebraic terms. E201 Simplify single algebraic fractions by cancelling common factors. K82b Divide algebraic terms with powers.		0 /	1
Q13	E84 Form algebraic expressions from context. K84b Form an expression with one variable and two operations.		1 /	1
Q14	E84 Form algebraic expressions from context. K84d Form an expression from the perimeter of a 2D shape.		1 /	1
Q15	E84 Form algebraic expressions from context.		0 /	1
TOTAL			**9 /**	**15**
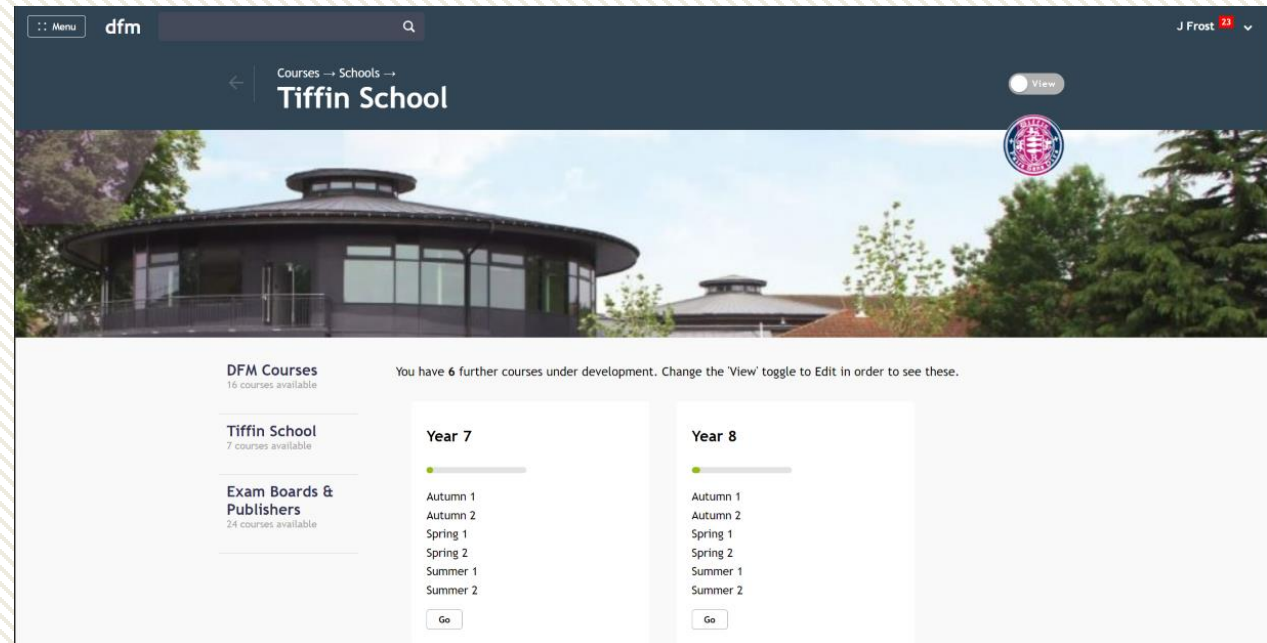
Building and assigning courses

Courses allow teachers and students to follow a sequence of learning from a scheme of work, an exam specification, or a publisher (such as White Rose Maths).

A course allows for Exam Skills, Key Skills, worksheets and Dr Frost lesson PowerPoints to be organised within your desired learning order.

Assigning a course

This toggle allows teachers to switch between View and Edit mode. Edit Mode is only available for your own school's courses.

DFM Courses are in-house courses, for those not following a specific exam syllabus.

'Your School' will contain courses that your teachers have built.

Exam Boards & Publishers are courses by exam boards (e.g. Edexcel, AQA) and other publishers (e.g. White Rose Maths).

Assigning a course

To assign an exam board/publisher/DFM course to your students, navigate to the course you want to use and press the toggle 'Use?'

Assigning a course

Assign the course to the relevant classes.

The course will now appear on your teacher dashboard and the students' dashboards.

Some benefits of using a course are
a)   You can browse 'by course' when using the question explorer.
b)   You can monitor student progress across a course
c)   Student may find it easier to search for relevant skills to practice when browsing by course.

You can also assign courses to classes from **Settings → Classes & Settings**, but the course must be 'Used' first.

You're now using this course at your school. It will appear in any dropdown list involving a choice of courses, e.g. on Manage Classes/the 'By Topic' explorer, as well as appearing in your school courses page.

Would you like to allocate this course to specific classes? It'll put a link on the home dashboard of students in these classes.

- ☐ 8KAF
- ☑ 8X1/Ma
- ☑ 8X2/Ma
- ☑ 8Y1/Ma
- ☐ 8Y2/Ma
- ☐ 8Z1/Ma
- ☐ 8Z2/Ma
- ☐ Charms
- ☐ herbology
- ☐ test 2

Submit

Building a course

To build a school course to align with a scheme of work, click on your school's courses folder and then click the **View** toggle to change to **Edit**. 'Create a course' will now appear.

:: Menu   dfm   🔍   M McDonagh ⌄

Courses → Schools →
Ravenpuff School

Edit ⚪

Change Banner

DFM Courses
16 courses available

Ravenpuff School
0 courses available

Exam Boards & Publishers
21 courses available

You have **1** further courses under development. Change the 'View' toggle to Edit in order to see these.

:: Year 8

Autumn 1A
Autumn 1B
Spring 1A

Go

\+
Create a course

Click 'Create a course' and give the course a name.

Building a course

Add the modules for your scheme of work. These could be organised by time frame or content.

Building a course

Click **+Add Unit** and populate each module with the relevant units. If you need to change the teaching order, drag the units/modules into a new position. (Note, you cannot change the order of units within a module once you have clicked inside the module).

Building a course

Click into a module to add content to each unit.

Ravenpuff School → My New Course → Term 1A →

Decimals

Edit

Change Banner

You may wish to include intended learning outcomes for the unit.

This unit does not have any content. If this is your school's course, teachers toggle to change to 'Edit'.

Put any introductory information about this unit here. Click to update.

+Add Resource

Include links to DFM-produced downloadable resources related to this unit.

Term 1A

Place Value
0 skills

Decimals
0 skills

+Unit

+Add Skill

You can add additional units to your module by clicking this button.

Click the +Add Resources. You will be given the option to include Dr Frost lesson PowerPoints, worksheets you have created or Dr Frost worksheet collections. You can also add external links to other webpages.

Revision

Select all Key Skills
Select all Exam Practice

Building a course

Decimals

Edit

Change Banner

Term 1A

Place Value
0 skills

Decimals
0 skills

+Unit

This unit does not have any content. If this is your school's course, teachers should click the 'View' toggle to change to 'Edit'.

Put any introductory information about this unit here. Click to update.

+Add Resource

Include links to DFM-produced downloadable resources related to this unit.

+Add Skill ←

Click + Add Skill. Search for skills in the usual way. You can add more than one skill at a time. Note that the skills will appear in numerical order, not in the order you select them.

If you wish for skills to appear in a different order, we suggest adding more units and breaking the content down further.

Revision

Select all Key Skills
Select all Exam Practice

Building a course

Expanding brackets

Edit

+Add Skill

Place Value
0 skills

Decimals
0 skills

Expanding brackets
1 skills

+Unit

179 Expand two brackets.
Mastery: 58/100

Set a Task   **Generate Worksheet**

Exclude any subskills that are not relevant to your scheme of work. Press the 'Example' button to check for the relevance/difficulty of the questions.

OR NARROW DOWN		VIDEO	DIFFICULTY	EXCLUDE?
☐ E179: Exam Practice: Expand two brackets.	Browse	🎞	1-4	No
☐ K179a: Expand two brackets in the form $(x-a)(x+a)$.	Example	🎞	1	No
☐ K179b: Expand two brackets in the form $(x \pm a)(x \pm b)$.	Example	🎞	1	No
☐ K179c: Expand an expression in the form $(x+a)^2$.	Example	🎞	2	No
☐ K179d: Expand two brackets in the form $(ax+b)(cx+d)$.	Example	🎞	2	No
☐ K179e: Expand a pair of brackets containing up to three terms.	Example	🎞	3	No
☐ K179f: Expand expressions of the form $(ax+b)(cx+d)-(ex+f)(gx+h)$.	Example	🎞	4	Yes
☐ K179g: Expand double brackets with subsequent simplification required.	Example	🎞	4	Yes

Building a course

Expanding brackets

Edit

Place Value
0 skills

Decimals
0 skills

Expanding brackets
1 skills
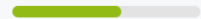
+Unit

+Add Skill

179 Expand two brackets.
Mastery: 58/100

Set a Task   Generate Worksheet

Exclude any subskills that are not relevant to your scheme of work. Press the 'Example' button to check for the relevance/difficulty of the questions.

OR NARROW DOWN	VIDEO	DIFFICULTY	EXCLUDE?
☐ E179: Exam Practice: Expand two brackets.	Browse ▦	1-4	No
☐ K179a: Expand two brackets in the form $(x-a)(x+a)$.	Example ▦	1	No
☐ K179b: Expand two brackets in the form $(x \pm a)(x \pm b)$.	Example ▦	1	No
☐ K179c: Expand an expression in the form $(x+a)^2$.	Example ▦	2	No
☐ K179d: Expand two brackets in the form $(ax+b)(cx+d)$.	Example ▦	2	No
☐ K179e: Expand a pair of brackets containing up to three terms.	Example ▦	3	No
☐ K179f: Expand expressions of the form $(ax+b)(cx+d) - (ex+f)(gx+h)$.	Example ▦	4	Yes
☐ K179g: Expand double brackets with subsequent simplification required.	Example ▦	4	Yes

Building a course

When your course is ready toggle 'Edit' back to 'View'. You can now toggle 'Use?' and assign to the relevant classes.

Student progress: by topic/course
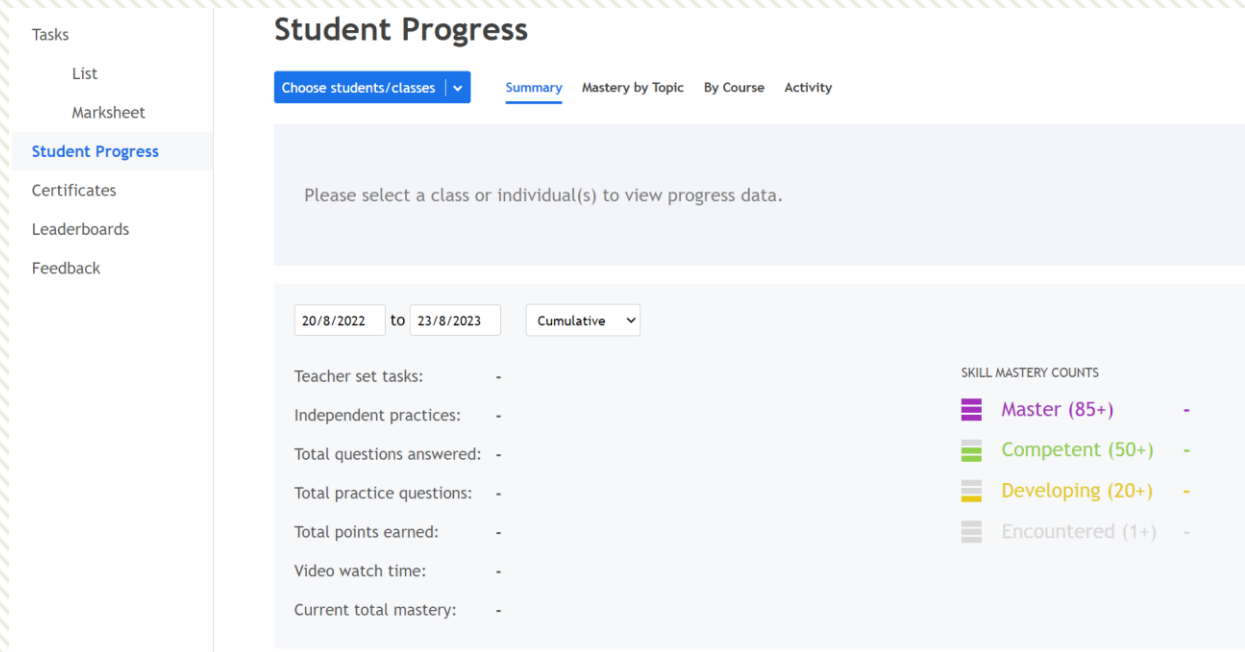
Use the left **Menu -> Progress Data or** click 'View Student Progress' from the dashboard.

Select 'Student Progress' and the relevant class.

Viewing progress by mastery/course

The **Summary** view is useful for seeing aggregate activity stats for a class/student over a period.

Student Progress

11X1/Ma ▾ | Summary | Mastery by Topic | By Course | Activity

20/8/2022 to 23/8/2023 | Cumulative ▾

Cumulative
By Individual

Teacher set tasks:	12
Independent practices:	844
Total questions answered:	11,313
Total practice questions:	6,048
Total points earned:	34,967
Video watch time:	0 mins

By switching to 'By Individual', you can also see statistics by individual within your selection.

55

▬ Competent (50+) 204
▬ Developing (20+) 712
▬ Encountered (1+) 2370

STUDENT	TOTAL QS	PRACTICE QS	POINTS	VIDEO	MASTERY	▬	▬	▬	▬
Vprun, Osbu	150	9	434	0 mins	913	62	6	2	0
Nvelgq, Sgoa	246	70	812	0 mins	1,585	80	19	3	0
Hccindb, Ltiyzxv	650	509	2412	0 mins	4,601	56	12	4	34
Otasal, Onuftde	192	60	568	0 mins	1,212	55	17	2	0
ADUPAMHW-AZSYR, Ywvmb	275	79	1039	0 mins	2,092	104	23	4	0
RJQDVOG, Gaeczz	179	0	661	0 mins	1,428	81	17	1	0
npekxdnvamhv, Vzsvzcr	631	405	2183	0 mins	4,624	80	56	20	2

Tasks
> List
> Marksheet

Student Progress

Certificates

Leaderboards

Feedback

Viewing progress by mastery/course

The **Mastery by Topic** view allows you to search for a topic and view each student's mastery with the skills in that topic. Use the drop downs to navigate to your desired topic.

Student Progress

| 11X1/Ma | ▾ | Summary | **Mastery by Topic** | By Course | Activity |

● Current ○ Timeline

| KS3/4 ▾ | Shape, Space & Measures ▾ | Circle Theorems ▾ |

	Circle Theorems	306 Understand and apply all circle theorems.	238 Further terms in relation to circles, including chord and segment.	307 Use the Intersecting Chord and Intersecting Secant theorems.
Sqsxy, Wbty	8	8	☰	
Rmxxvc, Uqhb	8	8	☰	
Aqchydw, Rzjlrgj	199	100	☰	100 ☰
Ytip 01F7/Eo Xubjyej,				
Okkkur, Pxvqoxh				
FTFUZRSQ-UWAAX, Umcwm	33	33	☰	
HPYOGZF, Fqqifv	25	25	☰	
bdezuxxoubvt, Bpcjzgm	116	83	☰	33 ☰
Upx, Kdrfnn	8	8	☰	
Xqbegjo, Jlnnhzirq	42	42	☰	
Uagg, Rtkvw	17	17	☰	
Kusu, Yeao	25	25	☰	
Pre, Nfcao	33	33	☰	
Geqpiwycgg, Tbejjf	8	8	☰	

Remember, student mastery goes up or down with each piece of assigned work or independent practice they undertake on the associated skill.

Viewing progress by mastery/course

If you have assigned a course to your class, you'll also be able to see mastery by course/module/unit.

| 9X1/Ma ⌄ | Summary | Mastery by Topic | **By Course** | Activity |

⦿ Current ◯ Timeline

| Year 9 ⌄ | Autumn 1 ⌄ | Factorising Quadratics ⌄ |

	Factorising Quadratics	178 Factorise out a single term.	193 Factorise quadratics of the form $x^2 + bx + c$.	195 Factorise a quadratic where the coefficient of the x^2 term is not 1.	194 Factorise the difference of two squares.	196 Factorise more difficult non-quadratic expressions, e.g. combining factorisation techniques or requiring factorisation of a bracketed term.
Zklirdo, Dzhdm	299	66 ☰	75 ☰	58 ☰	83 ☰	17 ☰
Woopt, Zgeg	116	8 ☰	50 ☰	50 ☰		8 ☰
Dhtfrfvgiiizd, Tfcpewl	91	8 ☰	42 ☰	33 ☰	8 ☰	
Cqsilmigxdzngk, Hcks	183	17 ☰	58 ☰	66 ☰	25 ☰	17 ☰
Vzhtjzg, Indqyt	58	8 ☰	33 ☰	17 ☰		
Tzse 0U8/Ek Pmrdzvj,						
Cncmwydzna, Oposqcc	100		42 ☰	50 ☰	8 ☰	
Dtacg, Ldlhgi	91	33 ☰	33 ☰	25 ☰		
Tcdrndtrk, Fqhoo	399	42 ☰	83 ☰	83 ☰	100 ☰	91 ☰

Viewing progress by activity

Finally, use **Activity** to see a timeline of all student activity, including independent practice.

11X1/Ma ⌄   Summary   Mastery by Topic   By Course   **Activity**

20/8/2022 to 3/11/2022   All Activity ⌄

You can change to 'Independent work' if you wish to monitor only this.

STUDENT	TASK	TIME TAKEN	WHEN	SCORE
Ywi, Lskp	**Senior Maths Challenge 2012** Independent Practice	27 mins	3 hours ago	2/2
Icvj, Jzypq	**E261 Exam Practice: Determine probabilities from Venn Diagrams, E219 Exam Practice: Construct Venn Diagrams,** Independent Practice	8 mins	5 hours ago	6/10
Canh, Afnee	**E284 Exam Practice: Understand the effect of the transformations $y = f(x+a)$ and $y = f(x) + a$ on simple functions, E285<...** Independent Practice	39 mins	5 hours ago	5/10

Viewing progress by activity

20/8/2022	to	3/11/2022	All Activity ▼

STUDENT	TASK	TIME TAKEN	WHEN	SCORE
Ywi, Lskp	**Senior Maths Challenge 2012** Independent Practice	27 mins	3 hours ago	**2/2**
Icvj, Jzypq	**E261 Exam Practice: Determine probabilities from Venn Diagrams, E219 Exam Practice: Construct Venn Diagrams,** Independent Practice	8 mins	5 hours ago	**6/10**
Canh, Afnee	**E284 Exam Practice: Understand the** $y = f(x) + a$ **on simple functions,** Independent Practice			

Clicking any row will open the task attempt. Here you will be able to view the questions the student answered and leave feedback in the usual way.

← **Cypo Rae**
Senior Maths Challenge 2012

Attempt 1/1 ▼   **Unassign Task**   **Mark as Incomplete**

Question 1
20 mins   ✓

[SMC 2012 Q1] Which of the following cannot be written as the sum of two prime numbers?

CORRECT ANSWER:
See full markscheme
11

STUDENT ANSWER:
Report Error
11

Write a new comment

Question 2
8 mins   ✓

[SMC 2012 Q2] The diagram shows an equilateral triangle, a square and a regular pentagon which all share a common vertex. What is the value of θ?

CORRECT ANSWER:
See full markscheme
$\theta = 102\,°$

STUDENT ANSWER:
Report Error
$\theta = 102\,°$

Leaderboards

Use the left **Menu -> Progress Data** and select 'Leaderboards'.

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Leaderboards

Whole School ▾   Sort by mastery ▾   Use date range

RANK	STUDENT	TOTAL MASTERY	TOTAL POINTS
1	Hfwph JMZFX (8X1/Ma)	9927	9204
2	Kcbydx RWAD (7RXH)	8865	18059
3	Scwpcwt Iq-Siwai (11Y2/Ma)	4467	12568
4	Kacw Aspz (11X1/Ma)	4241	13118
5	Eytpm Srcqajvq (11X1/Ma)	4210	4799
6	Nanj ZWLCIUH	3588	31681

You can select the whole school, a whole year group or a specific class.

Leaderboards

You can specify a date range. If a date range is used then 'Total Mastery' will not be displayed.

Export the current leaderboard to Excel.

Generate a shadow paper

Open **any saved worksheet.** This could be a Past Paper or one of your own worksheets. Under the 'More Options' menu, choose **Generate Shadow Paper**.

:: Menu   dfm   🔍   J Frost [23] ⌄

/ DFM / Past Papers / Pearson Edexcel / IGCSE 9-1 Foundation
← **Edexcel IGCSE(9-1) January 2019(R) 2F**

[Set as Task] [Save] [Save As] [Download] ⛶

View   Edit   More Options ⌄

Delete Worksheet
Generate Shadow Paper
Try as a student

Question 1   1 **2** 3 4

[Edexcel IGCSE(9-1) Jan 2019(R) 2F Q1a]

Put these decimals in order of size.
Start with the smallest decimal.

(1 mark)

:: 7.831

:: 7.04

:: 7.002

:: 7.9

:: 7.013

Submit Answer

Generate a shadow paper

The template will populate with questions, replacing the original question with a close matching alternative. A close match will be offered where a Key Skill within the original question can be identified. For more uncommon questions, the skill (not a Key Skill) is identified, and an exam question on the relevant skill is used.

If an exam question has been identified but it is not a close enough match, use the refresh icon to generate a different exam question.

Generate a shadow paper

No saved location
Edexcel IGCSE… Generate

No saved location
New Worksheet

Set as Task Save Save As Download ⤢

Save Options ▾

View **Edit**

Question 1 ✕

Skill: **K18d Order decim…** ▾

Question 2 ✕

Skill: **K31e Convert a p…** ▾

Question 3 ✕

Skill: **K31c Convert a n…** ▾

Question 4 ✕

Skill: **K31d Convert a n…** ▾

Question 5

Skill: **E22 Multiply dec…** ▾

Question 1 1 2 **3** 4 ↻ ✕

Put the following numbers in order, starting with the smallest.

:: 22.463

:: 22.404

:: 22.7799

:: 22.6

Question 2 **1** 2 3 4 ↻ ✕

Write

$$80\%$$

as a decimal.

✏️ _____

Question 3 **1** 2 3 4 ↻ ✕

Convert

$$0.16$$

to a fraction.
Give your answer in its simplest form.

You will need to save the shadow paper as a new worksheet before clicking 'Set a Task'.

To further improve the exam question selection, click on the exam code and filter to your chosen exam board and difficulty level.

$$0.2$$

to a percentage.

✏️ _____ %

three calculations below are to be written in descending order.

X $0.6 \times 0.5 + 0.4$
Y $0.6 \times 0.5 \div 0.4$
Z $0.6 \times 0.5 \times 0.4$

What is the correct order?

Question 6 **1** 2 **3** 4 ↻ ✕

[OCR GCSE June 2016 2F Q3a]

Choose a value from each list to complete the following sentences.

The weight of a tin of soup is about……..

(1 mark)

Create a worksheet template

You can create a random collection of questions, with Exam Skills and/or Key Skills, which you can regenerate whenever you need a new set of questions. A great feature for retrieval practice!

Worksheet templates appear with a cog icon in your directory.

Create a worksheet template

From **Menu → Question Explorer**, select the skills or subskills you require then click the **Generate Worksheet** button (or the **Set a Task** button then choose the 'Fixed Questions' option.)

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313 Simplify surds.
Mastery: 0/100

OR NARROW DOWN		VIDEO	DIFFICULTY	RECENT ACCURACY
☑ E313: Exam Practice: Simplify surds.	Browse	📹	1-4	
☐ K313a: Simplify a surd.	Example	📹	1	
☐ K313b: Simplify a multiple of a surd.	Example	📹	2	
☐ K313c: Write a surd in the form $\sqrt{a}$.	Example	📹	3	

314 Multiply and divide surds.
Mastery: 0/100

OR NARROW DOWN		VIDEO	DIFFICULTY	RECENT ACCURACY
☑ E314: Exam Practice: Multiply and divide surds.	Browse	📹	1-4	
☐ K314a: Multiply two surds.	Example	📹	1	
☐ K314b: Multiply two surds that require simplifying.	Example	📹	2	
☐ K314c: Divide two surds.	Example	📹	2	
☐ K314d: Divide two surds that require simplifying.	Example	📹	2	
☑ K314e: Expand a single bracket with surds.	Example	📹	2	
☑ K314f: Expand two brackets involving surds in the form $(a + \sqrt{b})(c + \sqrt{b})$.	Example	📹	3	
☐ K314g: Expand two brackets with surds, where subsequent simplification of surds required.	Example	📹	3	
☑ K314h: Expand two brackets involving multiples of surds.	Example	📹	3	

Your selection

:: E313 Exam Practice: Simplify surds. ✕

:: E314 Exam Practice: Multiply and divide surds. ✕

:: K314f Expand two brackets involving surds in the form ✕

[Set a Task]

[Generate Worksheet]

[Have a Go]

Create a worksheet template

Generate Worksheet

E313: **Exam Practice: Simplify surds.**
E314: **Exam Practice: Multiply and divide surds.**
K314f: **Expand two brackets involving surds in the form** $(a + \sqrt{b})(c + \sqrt{b})$.
K314e: **Expand a single bracket with surds.**
K314h: **Expand two brackets involving multiples of surds.**

This facility, using the skills you selected, allows you to create a fixed set of questions that you can either **set as a homework/assessment** or **export to Word** as a worksheet.

Num Questions: | 3 of each subskill (15 total) ▼ |

Interleave Skills: | Yes ▼ | [?]

Generate

Decide how many questions on each subskill you want to have in your template and whether you want the skills to interleave.

Create a worksheet template

← No saved location
New Template   Generate

No saved location
New Worksheet

Set as Task   Save   Save As   Download

Save Options ⌄
Save Template
Save Template As

More Options ⌄

Use the drop down to 'Save Template As'. You can save it in your own teacher directory or in the school shared folder.

Question 1   ✕

Skill: E313 Simplify su... ⌄
Board: Exam Questions Only
Difficulty: 1-3 ⌄
Calculator?   Unspecified ⌄

Write $5\sqrt{3}$ as a single square root.

✏️ [   ]

[Edexcel GCSE Nov2005-5H Q20bi]

Expand and simplify

$$\left(\sqrt{3} + \sqrt{15}\right)^2$$

Question 3 1 2 **3** 4 ↻

Simplify:

$$\left(\sqrt{7} - 1\right)\left(\sqrt{7} - 3\right)$$

✏️ [   ]

Question 4 1 **2** 3 4 ↻

Simplify

$$\sqrt{11}\left(4 + \sqrt{2}\right)$$

✏️ [   ]

Question 2   ✕

Skill: E314 Multiply an... ⌄
Board: Edexcel→GCSE Higher
Difficulty: 3-4 ⌄
Calculator?   No ⌄

You can change the settings on the left-hand template. E.g. filter the questions to a specific exam board, specify a difficulty level, or whether a calculator is allowed.

Question 3   ✕

Skill: K314f Expand two... ⌄

Simplify:

$$\left(5 - \sqrt{5}\right)\left(\sqrt{20} - 1\right)$$

✏️ [   ]

Expand and simplify the following:

$$\left(1 + \sqrt{12}\right)\left(5 - \sqrt{3}\right)$$

✏️ [   ]

Question 7 1 **2** 3 4 ↻

[Edexcel IGCSE May2014-3H Q18 Edited]

A trapezium $ABCD$ has an area of $5\sqrt{6}$ cm^2.

Diagram **NOT** accurately drawn

AB = 4 cm.

Question 8 1 2 **3** 4 ↻

Simplify:

$$\left(5 + \sqrt{7}\right)\left(3 - \sqrt{7}\right)$$

✏️ [   ]

Question 4   ✕

Skill: K314e Expand a s... ⌄

Create a worksheet template
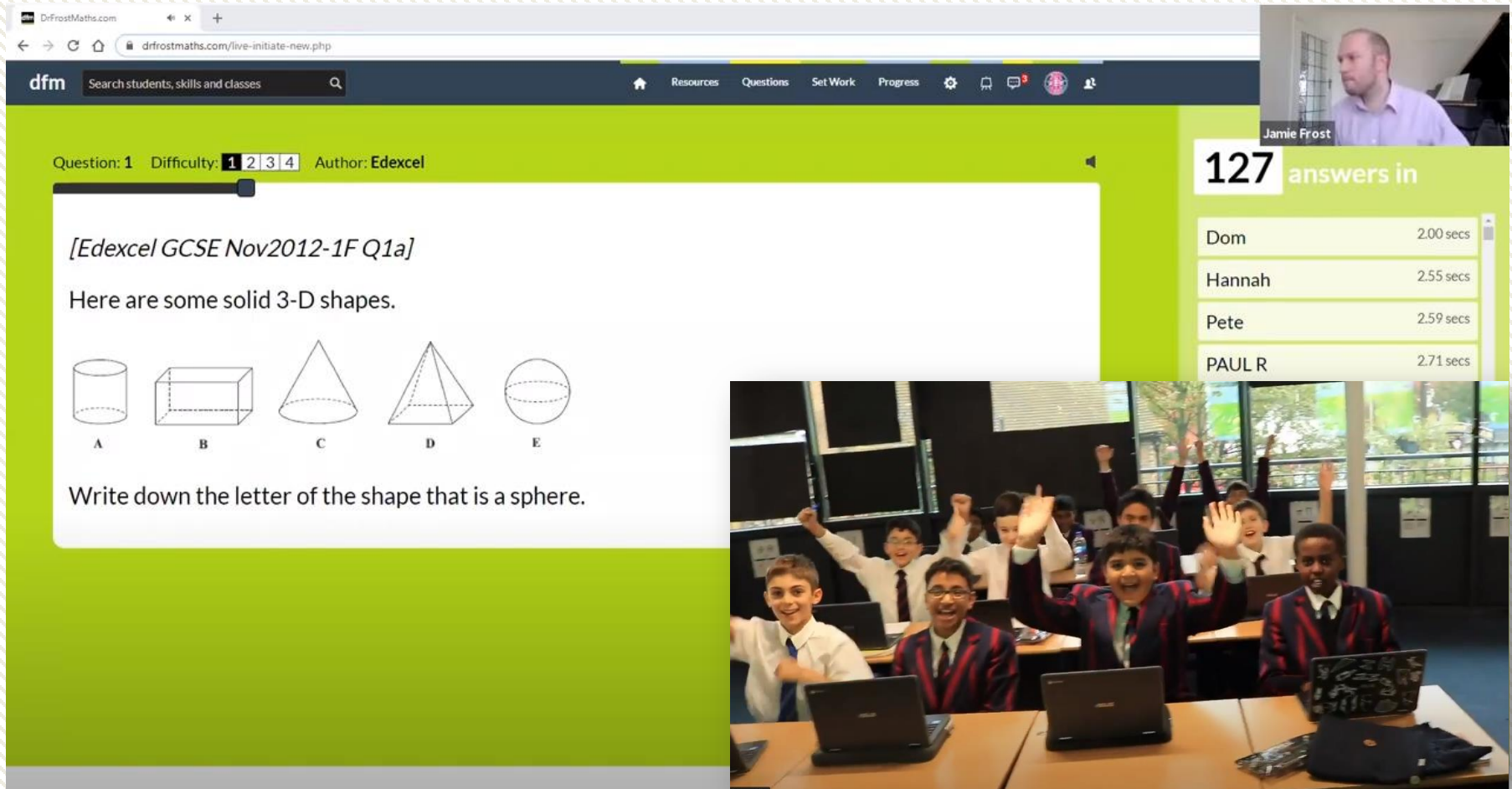
Once saved, every time you access the template from your worksheet directory, the worksheet will be empty. Press **'Generate'** to populate the worksheet with questions.

You will need to save the worksheet created from the template before you can set it to your class.

Live! Game

A Live! game is designed for a classroom environment. Questions are presented on the board one-by-one. Students use their mobile phones or tablet devices to enter their answers.

Live! Game

A Live! game can be played from a saved worksheet, or the teacher can select Key Skill and/or Exam Practice from the question explorer and start a Live! Game immediately.

To play from a saved worksheet, go to **Menu-> Past Papers/Worksheets** and open a worksheet. Click the **Set a Task** button and choose '**Live Task'.**

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⚙ Classes & Settings

❓ Training

✕
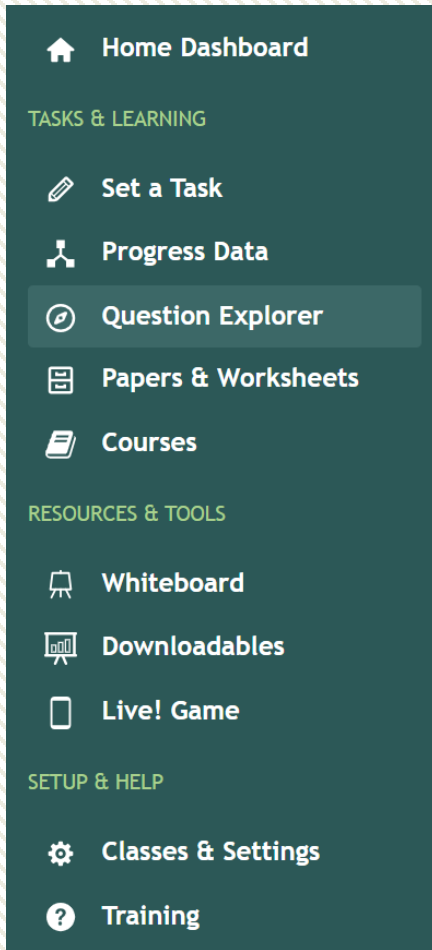
○ **Normal task**
Students complete questions at their own pace, either as homework or as a class task.

◉ **Live! task**
Students play along with their mobile/tablet device. Students all answer a question at the same time, with the game controlled by the teacher.

Continue

Live! Game

To play a Live! Game immediately from your Key Skill and/or Exam Skill selection, go to **Menu -> Question Explorer.** Select the subskills you want to be used and press **'Set a Task'** and then choose 'Live! Game'.

Live! Game

Select an option for participants

This allows you to control whether login is required to join the game, and whether participants are allowed to use a custom nickname.

Select a class ▾

- DFM login required (no nicknames)
- DFM login required (nicknames allowed)
- Guests allowed
- **Select a class**

In the normal mode, the fastest correct answer gets 1000 points, with a minimum of 500 for a correct answer.

Faster answers get more points ▾

What appears on student screens?

If you're doing the game remotely, choose for the question to appear on your students' screens.

Answer input only ▾

Start Game

If you're playing with a school class, choose the **'Select a class'** option at the top. This will make it easier to know which students haven't yet joined the game.

Turn the speed bonus off if preferred.

It is recommended to choose 'Question and answer input' when running a Live! Game remotely, or if the questions come with diagrams which may be difficult to see from the front of the class.

Live! Game

Passcode: **435718**

Join: **dfm.live**

Awaiting people to join...

Passcode: **435718**
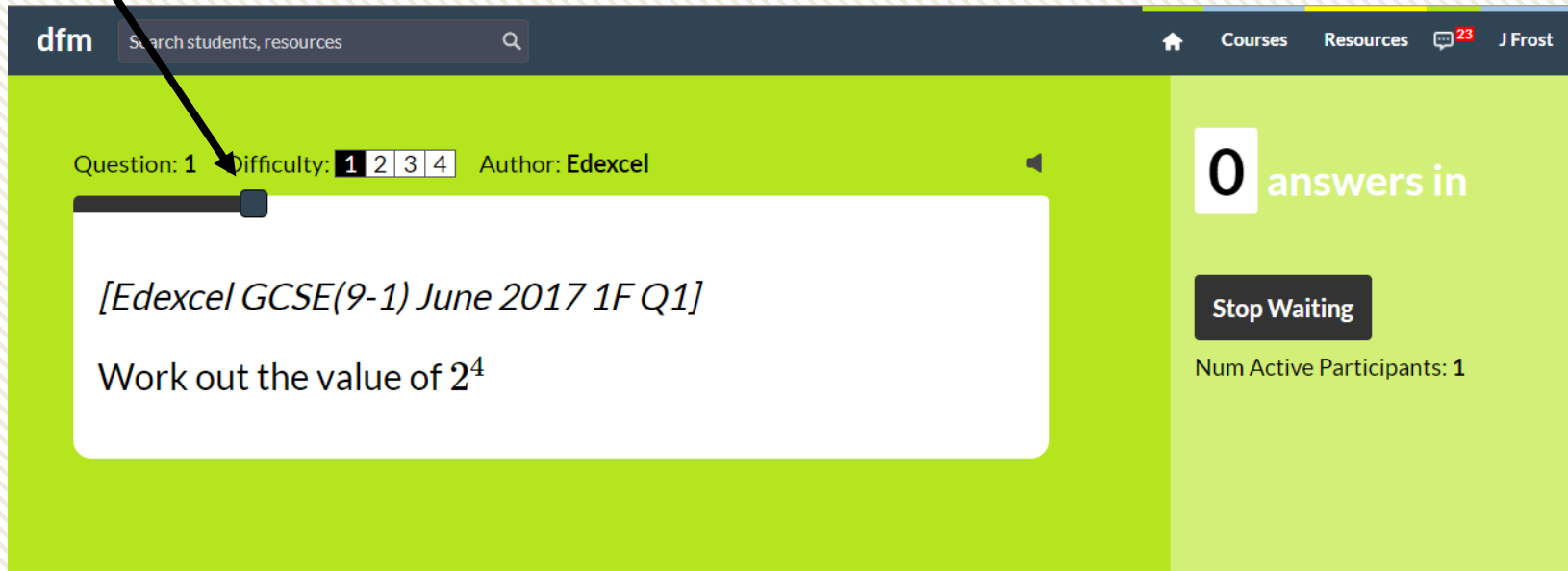
Join: **dfm.live**

Start

These people have joined so far... (1)

EulerRocks ×
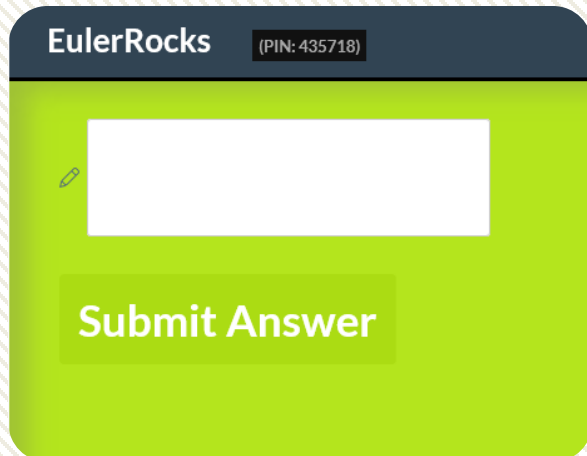
When everyone has joined, click the **Start** button that will appear at the top-right.

Live! Game

Use the zoom slider to make the question smaller or larger.

dfm   Search students, resources 🔍   🏠 Courses Resources 💬23 J Frost

Question: **1**   Difficulty: **1** 2 3 4   Author: **Edexcel**   🔊

[Edexcel GCSE(9-1) June 2017 1F Q1]

Work out the value of 2^4

0 answers in

Stop Waiting

Num Active Participants: **1**

EulerRocks   (PIN: 435718)

✎

Submit Answer

Students will see something like this on their device. Note that if the answer is algebraic, the student will need to use the pop up a keypad to input their answer. You may need to factor this into your waiting time if the input is complex.

Live! Game

dfm | Search students, resources | 🔍 | 🏠 Courses Resources 💬23 J Frost

Question: **1**   Difficulty: **1** 2 3 4   Author: **Edexcel**   🔊

[Edexcel GCSE(9-1) June 2017 1F Q1]

Work out the value of 2^4

0 answers in

Stop Waiting

Num Active Participants: **1**

The question will end once all students have entered an answer, and the correct answer will be displayed. You can press **Stop Waiting** at any time.
You'll have the option to view your students' answers after each question, but please note that **student responses are not saved within progress data** and their accuracy does not go towards their mastery with the associated skills.

At the end of the game, students will see their rank on their screen, and the leaderboard will appear on the teacher screen.

Organising the worksheet directory

:: Menu   dfm   🔍   M McDonagh ⌄

+ New   My Home Folder

← **M McDonagh**   Sort: Last Updated ⌄

Past Papers
Ravenpuff School
Revision
Topic Tests

📁 **A Level**   📁 **Data**   📁 **Number**   📁 **Shape**
2 worksheets   2 worksheets   1 worksheet   2 worksheets

A Directory

☐   ⚙ **Expand a single   ⚙ **Surds retrieval Y11**   📄 **Expanding single
                        bracket retrieval**   12 questions   brackets**
                        12 questions   15 questions

Click on your school's
name to access shared
folders and restricted
folders.

gle   📄 **Averages**
exam   3 questions

20 questions

A Template

A worksheet

Sort alphabetically
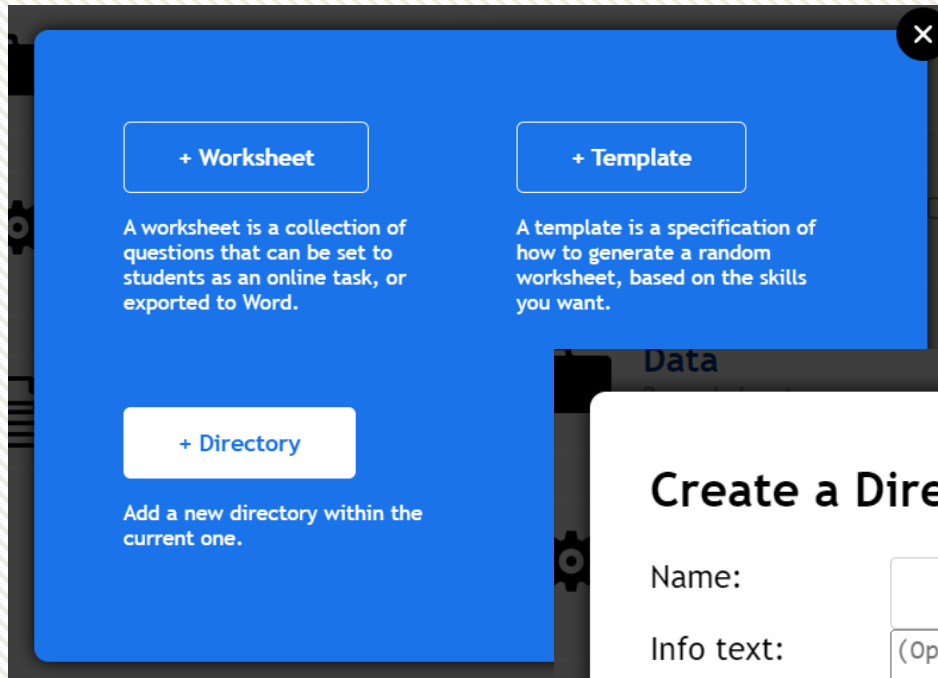
Dr Frost Learning is a registered charity
in England and Wales (no 1194954)

Organising the worksheet directory

Click +New to add a new worksheet, template or directory.

Organising the worksheet directory
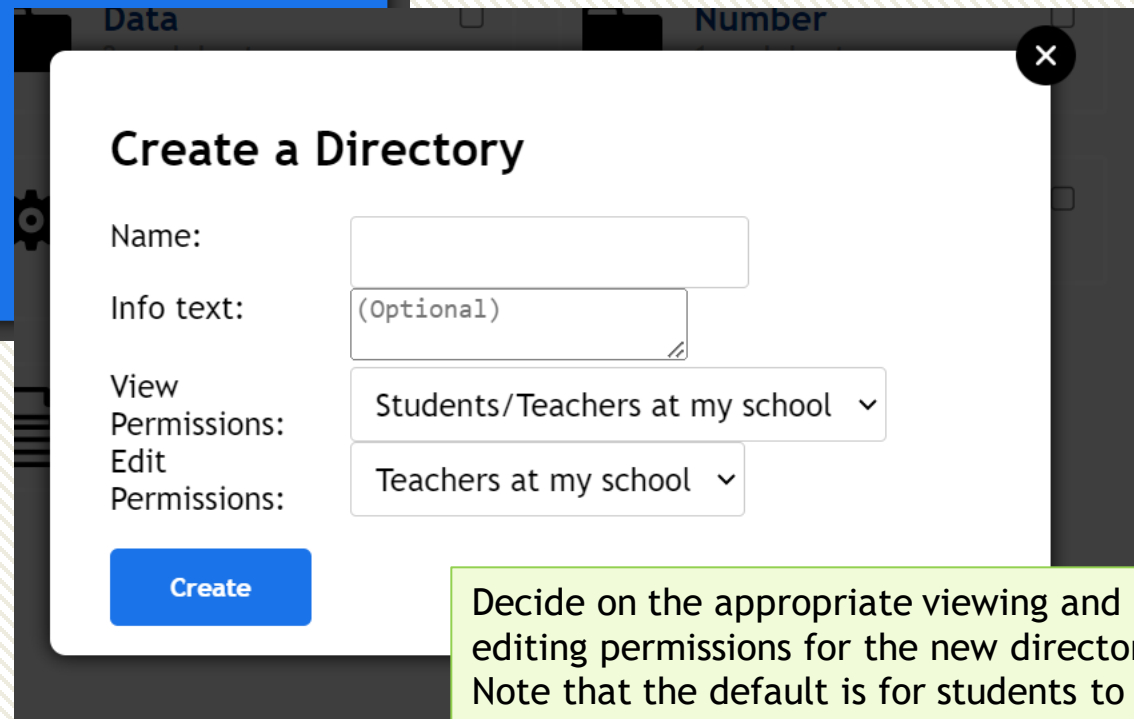
Decide on the appropriate viewing and editing permissions for the new directory. Note that the default is for students to be able to view teacher worksheets.

Organising the worksheet directory

By selecting one or more worksheet, the option to move or delete the worksheet will appear. You can move a worksheet into another directory within your individual directory, or into the school shared/restricted directory.

The school shared directory is visible to students at your school, the restricted directory is not visible, so the latter is useful for saving assessment materials.

Organising the worksheet directory
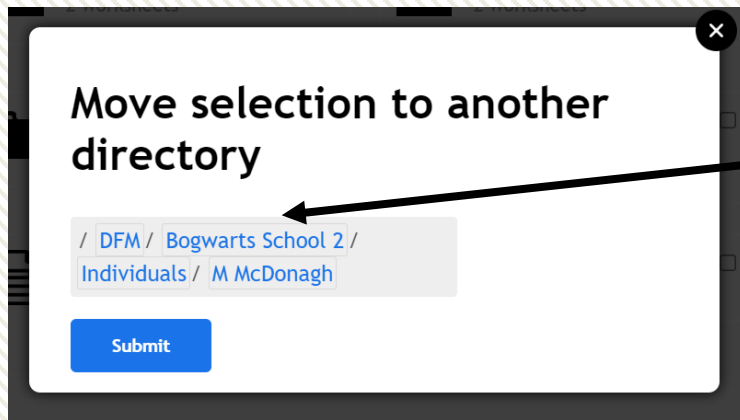
To move the worksheet, click 'Move' and then select the desired parent folder.
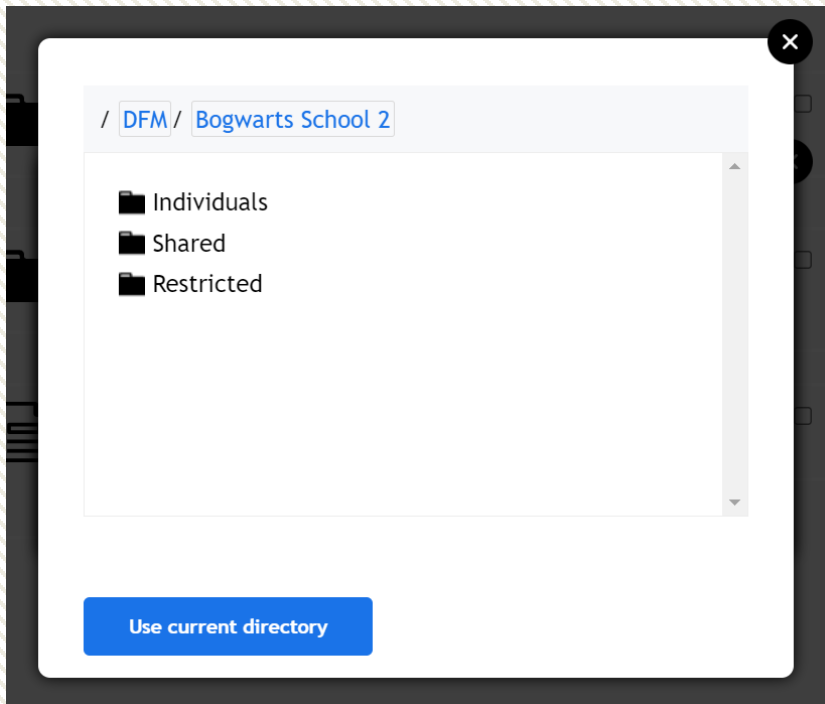
Select the directory you wish to move the worksheet(s) to and select 'Use current directory'.

How do I...

Make my own questions?

There is no direct link within the site, but you can access here:

www.drfrostmaths.com/add-question.php

You could then use your questions within a worksheet. These questions will be available to you when building a worksheet, but won't be publicly available.

Change a student's class?

Type the student into the search bar on the top menu. Click the student and select 'Move Class'.

Deal with students who have left the school?

Menu → Classes & Settings. Select the 'CLASSLESS STUDENTS' class from the dropdown. Select all the relevant accounts and choose 'Archive' from 'Apply Action'. This leaves the account open but will no longer appear when you search for students.

If you do a full school import, any students not in your import will be archived automatically.

Make an intervention group without the students leaving their normal class?

From Menu → Classes & Settings, use the + New Class button and click +Students. They will be added to the new class without being removed from their old class.

Change the order of learning in a course?

Go to your course and click the 'View' toggle to change to Edit. On this page only, you will be able to drag the modules to reorder them, you can also drag the units between within modules.

See a complete list of Key Skills/Exam Skills?

Menu → Question Explorer → Complete Skill List (link at bottom of page)

Quickly see all a student's question answering activity?

Menu → Progress Data → Student Progress → Activity

Change my school's name/logo?

On the top menu,
Classes & Settings → School Settings → Logo.

See summative statistics about my school's usage?

Menu → Progress Data → School Stats.
This will show you volume of usage by year group and volume of recent activity by teacher.