

Aiming for the November resits

How to prepare yourself and your learners
for a flying start in September



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Help prepare your learners for the November resit

If, at the age of 16 years, a learner has not achieved a minimum of grade 4 in GCSE Maths then they are mandated to sit a resit in order to try to move from a grade 3 to a grade 4. Those achieving less than grade 3 can sit Functional Skills Maths or GCSE Maths, depending upon their provider.

Research tells us that a GCSE resit learner comes to class with three major barriers to maths learning:

- prior negative experience of maths
- lack of confidence in their own ability
- relevance of the maths to what they are learning.

The evidence from exam outcome data shows us that the closer a resit learner is to their first sitting at school, in year 11, then they are most likely to gain the grade 4 which is the minimum grade required to negate the need for another resit opportunity.

The further away from their first sitting, the harder it is for them to gain a grade 4.

So, the November resit is the very best opportunity for a resit learner to gain that grade 4.

This booklet has been designed by curriculum experts and informed by research to help you to best prepare learners by focusing upon some of the key areas.

There are practical ideas and best practice approaches, focusing upon good exam technique and a range of top tips and key considerations.



Engagement and motivation

Understanding the three main barriers to engagement in maths, for a resitting learner, is key to success with a resit group. Adapting lessons to accommodate these barriers will yield benefits to all involved.

National Numeracy are a national charity supporting adults and kids with everyday maths at work, home and school. They host a YouTube channel where you will find a great deal of good videos and conversations around why good maths skills matter and you can utilise these in classes with resitters. You will find National Numeracy on YouTube.

Induction activities can play a big role in getting learners on board with a GCSE resit and help to alleviate some of the fears that people have. Postcard Pedagogy can have a big impact.

Give learners two postcards or post-it notes – ask them on the first postcard to answer:

‘Why are you having to do a GCSE Maths resit?’ Stick the postcards up on the wall for all to see.

They can answer anonymously.

You will see all of the answers – I didn’t listen at school – I didn’t have a proper maths teacher – my teacher hated me – I was ill. The list will be endless but it is a great conversation starter.

On the second postcard or post-it:

‘What will it mean to you if you get a grade 4 in your GCSE Maths this time?’

They know all the answers – I will get a better job – it will look good on my CV – my Dad will give me £50!

National Numeracy have figures that show that learners with a grade 4 earn more money over their lifetime at work than someone without.

Having full and frank conversations like this will enable learners to see the relevance, to allay fears about having to resit maths but more importantly getting them to realise that this is a second chance and that your class will be different to what has happened before.

A resit class should not be a repeat of year 11, in the same delivery style, only faster as you’ll simply get the same result. It has to look, feel and sound different to their previous experience with an onus upon the learner taking some ownership. It is all about revision.

Top tip: If it looks, feels and sounds the same as the maths they have seen before you’ll simply get the same result.

Key consideration: Resit learners have probably seen all of the maths before (they have grade 3) – certainly enough to gain a grade 4 – it’s just that they cannot do it all. Encourage them to revise from day 1 and do a little bit of maths every day using a revision plan and using the [AQA Revision Checklist](#) as guide of the topics to look at.

Deciding which learners to enter

Realistically, you have around 6 weeks of maths work before learners sit the November resit. You have to be ready on day 1 in terms of your delivery and the content. You should also set the expectations for your class and set the expectations of what learners can do to help themselves outside of the classroom.

There are varied approaches to selection for entry to the November exam series.

- A blanket approach – open to all
- Selected learners who were a few marks away from a pass in the previous June series. This is difficult to achieve if your cohort comes from a number of Secondary settings and collating the information can be tricky.
- Voluntary learners – those who opt to enter on the understanding that they follow an intense programme. You could filter these learners by using a full past paper mock to assess who is close.

Extolling the benefits of the November resit cannot be emphasised enough.

They are:

- You will have achieved the grade 4 minimum requirement.
- Grade 4 will open doors that you don't even realise are shut yet
- It will look great on your CV and will help with progression and employment
- You may have some deep-set fears about maths and this may overcome your maths anxiety
- As a centre your class size may become smaller if those who achieve the grade 4 in November no longer attend. It sends a positive message to other learners that people just like them can achieve a grade 4 in this class.

Omnipresent funding challenges in the whole FE sector unfortunately mean that the luxury of a November opportunity is out of reach for a lot of learners, with only one exam series entry being affordable.

For those that opt in or are selected, the work has to start from day one. That selection process cannot take too long as there is work to be done by learners and by the staff leading the programme. Realistically it is a six-week programme to success. Start off with checking their basic skills ability with the AQA resources, help to plug gaps is your starting point. Try to complete at least two full past papers before the November exam as well as walking, talking mocks, where you walk through an exam paper with learners and talk through model answers together.

Top tip: Dylan Wiliam encourages us to 'make the students the architect of their own learning'. This means giving them tools that they can use at home – great websites such as BBC Bitesize and Corbettmaths where they can do a lot of self-study and revision, starting from Day 1.

Key consideration: Set the expectations at the very start – maybe you will lay on some extra sessions for the November resitters, online or face to face. Attendance is non-negotiable, in order to maximise success. Perhaps you will have a self-study approach where learners have to complete various pieces of work at home. In any case, you need a six-week programme to success. A sample six-week plan is available as an appendix.

Revision-based approach

The etymology of the word 'revision' means to look back over the work, to revisit it.

Revision in maths means to re-vision the maths... to see it differently this time around – maybe a video, a thinking exercise, using a knowledge organiser, doing a little bit of maths every day.

Your learners have seen all of the maths before – it's just that they cannot do it all. They have a grade 3. They can do some maths but not enough to gain grade 4 and they won't have done any GCSE Maths since their last exam, commonly called the 'summer slump'.

There are also a number of issues that remain, post-Covid, that have impacted on learner's knowledge and ability to recall facts and deal with routine maths.

There are a number of other AQA resources which will help you to deliver a revision-based approach.

Basic Skills tests – a grade 3 learner will have some gaps in the 9 basics of maths, that underpins the rest of the GCSE Maths curriculum. Using the basic skills tests at regular intervals will help to shore up the basics and develop the 'cornerstones of maths' that Gemma Sherwood refers to in her subject knowledge enhancement books on [Number and Algebra](#).

5Rs Revision based approach – check out the 5Rs curriculum approach on the [webinar](#) to give you an idea of a structure that is popular in resit classes and has plenty of evidence to support its impact for resitters. The five Rs are recall facts, routine maths, revise a topic, repeat the topic with three exam questions and ready for the exam (exam technique)?

Revision Topics

Making the curriculum visible to learners is valuable. Using a resource such as the

[Revision Checklist](#) can help learners self-assess. It can identify the certain areas where they feel confident and where they feel less confident, which shows where the revision focus should be. Having a single document which contains all elements of the curriculum makes it seem smaller and more accessible. The [Topic Audits](#) available on All About Maths may also be put to good use here.

Remind learners to keep revising what they know, to make it even stronger, as well as working on the less confident areas.

Explore 'revision' early on with learners. Ask the following questions...

- What can you revise?
- When can you revise?
- How can you revise?
- Who could you revise with?
- Where can you revise?

Creating a six-week revision plan may be very useful for learners, identifying topics to revise on a daily basis, just for 20 mins per day. A sample six-week plan is available as an appendix.

Make a plan – stick to the plan

Top tip: Practice, practice, practice...not until you get it right, but until you cannot get it wrong

Key consideration: Revision is such a blanket term. It is worth exploring how, when, where, who with and what, in detail. Pinpoint tools that learners can use to support their revision – YouTube maths channels and websites specifically for GCSE Maths will hand a certain amount of control back to learners to help them, help themselves.

Curriculum focus

A typical resit programme will be a 30-week programme or 3 hours delivery per week, although there is significant variance around this depending upon the provider circumstances. A November resit condenses this into a six-week timescale and we have to be smart in identifying key areas likely to have the biggest impact and quickly.

Complete the [Basic Skills tests](#), three of them, with learners to quickly identify their gaps in the nine basics and start working on plugging those gaps.

A full past paper at the very start of the term will be very useful. Partly because they have not done maths since before the summer break and also it will be a good diagnostic tool.

Find out and focus upon what learners know and can do. Make this even stronger.

Find out what they sort of know and work on that to strengthen it.

If time allows work on what they don't know, but only if you have time.

50% of the exam is Assessment Objective No. 1

Use and apply standard techniques

Students should be able to:

- *accurately recall facts, terminology and definitions*
- *use and interpret notation correctly*
- *accurately carry out routine procedures or set tasks requiring multi-step solutions*

50% of the six-week plan should be focused upon AO1. Sorting out the blocks within the nine mathematical basics and strengthening every one of the nine parts, from times tables to division.

Work on things like the one-mark questions.

The first eight to ten questions are crucial to learner success at grade 4. This will support problem solving as we will see in that section.

High frequency topics are those that are most likely to come up in every exam series. Interestingly, 1/3 of the subject content is assessed per sitting with the whole curriculum being assessed over a three-year period. You know that Pythagoras theorem will come up as will ratio work, indices and probably work with parallel lines. Focused revision upon the high frequency topics, using the [Revision checklist](#) as a guide will be part of the learner plan. Tackling a topic for 20 minutes every day would be an effective use of time. Highlighting various websites and YouTube channels that learners can go to on the bus or in the canteen at lunchtime is part of understanding revision and devising their plan.

Top tip: Nobody went into an exam saying 'I revised too much!' Make a plan and stick to the plan.

Key consideration: Find out what learners can do and strengthen that. Find out what learners sort of know so that they then know it. Don't focus upon the topics that they really don't know until that work has been completed. There is enough work in the first two parts to ensure a grade 4 outcome.

Alternative methods

There is an unwritten marking rule that 'any valid mathematical method will gain the marks'.

By the age of 16+ learners will have a seen most standard ways of completing calculations such as division using a bus stop method and adding fractions using a common denominator. Yet these are two areas that they are still likely to struggle with, at the age of 16 years and beyond.

Take the example of 16×25 . There are 16 different ways in which this can be solved.

It is time, in a resit group, to say 'I don't think that you learn it like that, have you seen this method?'

Having a range of alternative methods in your repertoire, as a teacher, will serve you well with this cohort. Using tools such as a ratio table, fraction frame or treating division as simplifying a fraction can be a lightbulb moment for learners who perhaps think that there is only one way to complete a calculation.

Asking your learners to share methods can be very powerful. This is where the value of mini whiteboards comes into play. If you have a visualiser you can use it to share a range of methods. Develop learner confidence by asking learners to show their method on the board.

50% of the Foundation Tier exam is based on Assessment Objective number 1 – the recall of basic maths knowledge and routine maths. Using the [Basic Skills tests](#) to identify gaps is your starting point. Strengthening the gaps with a focus on exploring alternative methods can yield good benefits which in turn should strengthen problem solving and reasoning.

Mathematical fluency is key to a resit learners grade 4 success. Fluency in the nine

basics has been mentioned previously with the Basic Skills tests and by working on a range of alternative methods to strengthen these areas will make every subsequent area of maths easier and quicker to manage. Problem solving and reasoning are underpinned by mathematical fluency.

Top tip: It ain't what you do, it's the way that you do it. Any valid mathematical method gains the marks.

Key consideration: Consider how each of your learners completes a calculation. Allow them to share methods. Emphasise methods rather than answers. Build fluency in calculations.

Change your questioning from:

What is the answer to 22×34 ?

To

$22 \times 34 = 748$...how many different ways can you do this?



Alternative methods

Reports on the Exam tell us every year that learners have poor skills in using a ruler, protractor, compass and a calculator. The pandemic has compounded this issue as learners were not at home using their geometry sets on a regular basis.

It may just be that learners have not had enough practice using their fine motor skills with the tools – drawing various straight lines, measuring a range of angles, using a protractor to draw angles of varying sizes – being mindful of those learners for whom the motor skills may be an issue.

Protractors cause a number of classic difficulties. [Tom Francome](#) from the ATM talks about this. It can be simply not lining up the crosshair correctly. It can be using the incorrect scale. He has an excellent article which is worth working on with learners.

The use of a ruler is weak when it comes to lines of best fit, constructing a triangle and drawing within a graph or chart. Practice, practice, practice...

It can be very challenging to watch an inexperienced learner trying to draw a circle with a given radius using a compass. Watching them move both compass arms or even the paper tells us that they have not had enough practice and had compass use modelled to them. This is a where an animation or a visualiser to model it can be very useful.

Mastering a range of calculator skills will be more involved. Learners who are inexperienced will present certain traits. Picking up the calculator in the left hand and then trying to almost text in the numbers demonstrates this. Looking at an answer and rather than reading it out, but showing you the display demonstrates their lack of calculator confidence. There are plenty of resources available to support work on building calculator skills. Knowing what the

calculator is capable of and understanding what the calculator buttons do are the starting points. It is another case of practice making permanent!

Top tip: knowing how to use the tools of the trade will undoubtedly gain marks

Key consideration: do not assume that learners can work at the most simple level. Learners will struggle with mms, cms, ms and kms. Working with a ruler might mean you would be well advised to cover the pre-requisites of simple measures first. With protractors and using a compass, it may be a good idea to go through the basic angle rules beforehand.



Problem solving

Problem solving is underpinned by fluency in the nine basics of maths and then reasoning skills. A reminder that the nine basics are:

Addition, subtraction, multiplication, division, fractions, decimal, percentages, scale and ratio

Assessment Objective 1 is mathematical recall and routine maths

Assessment Objective 2 is communicating mathematically and reasoning

Assessment Objective 3 is problem solving

Colin Foster from the Mathematical Association tells us that fluency and reasoning are a means to support learners in problem solving. Working upon the basic skill areas and developing a range of alternative methods will strengthen a learners' ability to solve problems. Working upon reasoning and decision making, as well as the vocabulary of maths will also support problem solving.

Problem solving strategies: The main issues with problem solving is with any context and the amount of words within the problem.

Context: context can be difficult for learners. Maybe they don't like the topic or it means nothing to them, it has no relevance to them. You can start off by encouraging learners to recontextualise the scenario. Ask what could this question be about if it wasn't about gardening or going to the cinema. You could extract the maths and leave the context behind. Encouraging a close type activity could help learners accessing the problem.

eg Daniel wants to buy afor £27.50. He has £50 to spend and a voucher worth 5% off the price. Has Daniel got enough money to buy two of the ?

If it's tricky, draw a piccie:

Take the problem line by line... turn it into a cartoon style drawing to help you identify the context and make sense of the words, eg a petrol pump with a car with price per litre and money to spend in a wallet with a discount voucher.

Scaffold the problem:

Give learners a problem and the solution and ask them to marry the two together; give the problem one line at a time or in small chucks – card activities work well; show two versions of the problem with different solutions – one right and one wrong – decide who is right and why; encourage visual representations, eg fill in a table or complete a sentence from a stem such as 'Syrah should choose Supermarket B because...';

Top tip: Problem solving is built upon mathematical fluency and reasoning...build those alongside problems.

Key consideration: Words are often the problem. Too many words will turn a learner into a 'page turner' where they don't like the look of the exam question and will move onto the next page without giving it some proper thought. Take a look at the [Worded problems](#) resource on All About Maths.

Exam technique

Reports on the Exam are always a source of useful information that can inform later cohorts. A rather large proportion of marks are dropped simply through poor exam technique. Quoting and paraphrasing statements from the Report on the Exam is a good idea.

'For example, learners just like you try to avoid division...let's look at different ways of doing division'

Poor exam technique may be shown in copying errors from the question to the calculation, illegible handwriting, place value errors, making a decision in the answer. The AQA document '[Small things make a big difference](#)' will really support this work. It gives examples of actual student work to show your class.

Knowing the [Command Words](#) used within exam questions will also form part of this work. The AQA document will assist as it identifies which should be known and understood.

There are certain marking strategies that can have a big impact upon improving exam technique:

Double marking: give learners two marks in any test that they complete. The first mark is the actual mark they have gained. The second mark is what they would have got if they hadn't made a silly error – eg copying across incorrectly, illegible numbers, decimal point in the wrong place, an incorrect times table error. Ask the learner to go back and rectify the silly errors as they are the easiest of all marks to rectify.

Mark to the first error: in any self-marking test ask learners for their mark overall and then ask them for the mark to the first error that they made. These first errors are commonly made through a silly error. This challenges learners to check their answers and try to lengthen the time to any first error being made, whilst still trying to improve their overall score.

Spoof analysis marking: show learners work completed by 'a learner' where the answer is wrong. Ask learners to identify what error has been made and why, and then what the answer should be. This helps to tackle maths anxiety as it is not them making the mistake and it helps to tackle classic maths misconceptions such as $24 = 8$.

Top tip: you don't need 100% to gain a grade 4...you don't need 100% to gain a grade 5...maximise your mathematical marks and tidy up on exam technique and you are almost there.

Key consideration: Resitting learners can lose anything up to 10 marks through poor exam technique. It is worth having a section of work in every lesson where you focus not upon the maths but good exam technique.

Putting it all together

All of the elements for the November sitting will serve you well with a full year cohort. The focus and approaches still apply but you will have a longer timescale for implementation.

Consider the following approaches:

- Re-visioning the maths with a focus on revision and then promote Daily Maths
- Start with the nine basics of maths
- Identifying a range of mathematical methods to develop fluency
- Making a visible curriculum, strengthening what they already know and what they sort of know
- Good exam technique and use good marking strategies
- Use the Tools of the Trade

Benefits of achieving early success with grade 4

Timesaving – learners will have lesson time back and will not have to spend money getting to class

Increases learner confidence and self-worth which could impact on other courses

Gives them an edge over learners without grade 4, in the employment market

They may decide that they like maths!

Beyond grade 4

What can you do with learners who gain a grade 4 in the November sitting?

Firstly, celebrate their success and make sure that everyone else within that cohort get the message that learners, just like them, can gain a grade 4 in this class. Ask those learners for their top tips that may help other learners. Invite them into classes for a discussion on what worked for them.

Secondly, invite those successful learners back. A grade 4 is great... well done... but a grade 5 or 6 would be even better on your CV. Invite them back and offer to enter them for the higher tier paper in the summer. This is aspirational and they can apply a lot of the techniques that they have found to be successful in the six-week November resit programme. There is a longer timescale from January, when the results come out, to June, when the next exam series is, so start revising... a little bit of maths every day.

Top tip: Practice may not make perfect, but it may make permanent

Key consideration: A revision-based approach will serve GCSE Maths resit learners well, both for the November resit and for a full year approach. It is based upon building good daily maths habits, strengthening what learners already know to make it even better, and sorting out what they sort of know.



A 5Rs Route Map to success for the November Resit - 6 weeks to success

There are three key aims in managing provision so that you aim for success in the November resit.

1. Identify the right learners for this pathway & consider if there is funding for this
2. Starting strongly and building good habits
3. Maintaining momentum



Week 1

Set the tone and lay out the expectations so that everybody is clear. There is a relatively short period of time to the November resit exam and the 5Rs revision process will suit learners well as an effective approach.

Focus upon [5Rs](#):

- **Recall** basic facts and figures
- **Routine** maths looking at the 1 and 2 mark questions
- **Revise** a topic every day
- **Repeat** the topic but with 2 or 3 exam questions
- **Ready** for the exam – focus upon exam technique

Educate learners in the 5Rs – it's all revision; directly links to the Assessment Objectives; focus upon improving Exam Technique; the starting point isn't that they know nothing; talk about how to revise and what to revise, where to revise and when to revise.

Barriers to success – there are three main barriers to success with a resitting learner:

- **confidence** in their own ability
- **prior negative experience** with maths
- **relevance** to them in their current situation.

Tackling these three head on with discussion opportunities should pay dividends.

Basic Skills assessment – use the AQA [Basic Skills tests](#) to identify first targets in the nine basics

What are the benefits? Make the benefits explicit – gaining the minimum of grade 4 GCSE Maths will open doors that learners don't even realise are shut yet.

Daily Maths – the expectation that learners will do some maths every day to the exam, just 20 minutes every day will improve outcomes... practice until you cannot get it wrong

Save the Date – put countdown and key dates in the diary (on their phone) and set alarms – no excuses that they don't know when the exams take place.

Remind your learners there are five weeks to success.

Week 2

Keep the momentum going by celebrating those learners who are doing everything expected, who are trying their hardest and putting some effort in. This 'success builds success' approach should start to affect those who are a little less motivated or who lack the confidence in their own ability.

A visible curriculum – use the revision checklist to track progress through revision and to plan out revision topics for the week...it should be feasible to expect a minimum of three topics and a maximum of seven topics to be revised each week, depending on how much time the learner has and how serious they are in giving it their best...up to the exam that could be as many as 40 topics covered.

5Rs Routines – building the 5Rs approach gets learners into a good maths habit. You don't need 100% to gain a grade 4 or a grade 5 – both are possible if you have learners putting in the effort to help themselves.

Maths fluency – help to develop better fluency in the basic skills using times tables challenges.

Countdown – remind your learners there are four weeks to success.



Week 3

Tools for the job – classroom experience and Reports on the Exam tell us that learners struggle to use a ruler, compass, protractor and calculator effectively. Plenty of practice opportunities are key to success and will guarantee learners will pick up more marks in these key areas.

Exam technique – focus upon good handwriting and laying out the workings so it can be followed. Use the [AQA Small Things make a Big Difference](#) document to support this work

Basic Skills Assessment – give a second round of the [basic skills tests](#) to demonstrate any improvements and help shore up the fluency

Countdown – remind your learners there are three weeks to success.



Week 4

One markers – focus upon a flying start to the exam... the first 8 marks from the first questions are the easiest to gain so a clear focus upon this area will improve exam performance. Learners commonly make silly errors in this area so the challenge is to get 100% of the marks from these first 8 questions.

Misconceptions – focus upon [misconceptions](#) in particular. Identify them as common errors that people like them make so that they can try to avoid the classic errors that people make. You can find maths misconceptions in a number of resource areas.

Revision checklist – notice the coverage being built up on the [revision checklist](#). Identify a range of websites and YouTube channels which may assist learners in targeted revision. Ask learners to identify some good accounts on TikTok which may help them.

Countdown – remind your learners there are two weeks to success.



Week 5

Breakfast maths – learners benefit from breakfast maths to do as a warm-up immediately before each paper... non-calculator first and then calculator warm-ups for Paper 2 and 3 breakfast maths resources are readily found.

Strategic start – show learners how they can make a flying start

- Skim and scan the first 10 questions at the start
- Decide which question they like the look of and are happy to attempt – in pencil, put a smiley face on them
- Decide which questions they are unsure about or don't like the look of – mark these with a cross
- Start the paper by attempting the questions they like the look of first

Final Countdown – countdown to success with a focus on what else can you do to revise and then what else can you do to help yourself.

Recall – facts and figures... tackle the assumed knowledge that we think learners should know, eg mms in a cm, cms in a m, degrees on a line, degrees in a triangle, time and calendar work, prime numbers, times tables, using coins and money. A constant reminder of the fundamental facts and figures will help cement these into the longer-term memory.

Countdown – remind your learners there is one week to success



Week 6

Keep learners revising and practising the skills up to the last minute of the last exam. Breakfast maths before Paper 3 will help them make a flying start to the exam.

Keep an eye on Tiktok and YouTube for tips and advice for GCSE Maths revision.

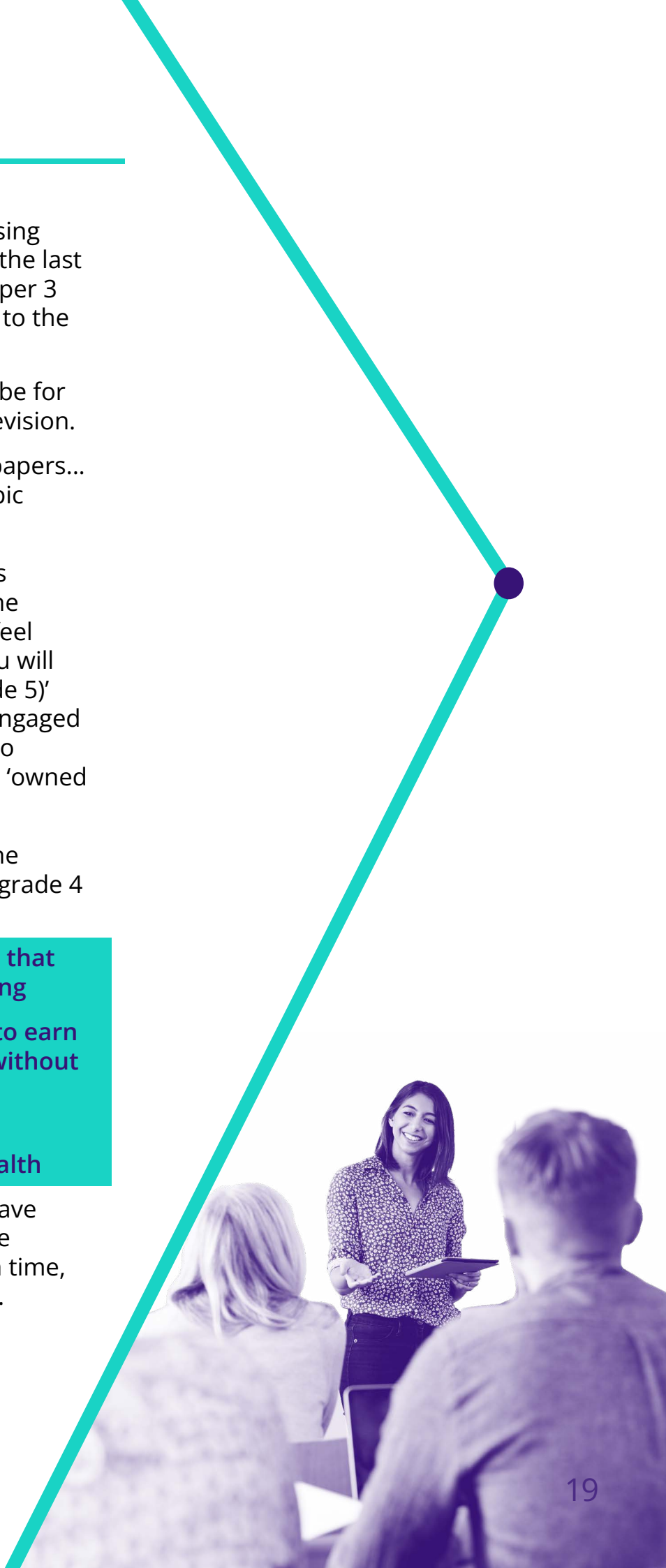
Take care when using predicted papers... there is no guarantee that the topic suggested will come up

A positive spin – keep learners motivated by putting them into the moment – ‘imagine how you will feel on results day when hopefully you will receive that grade 4 (or even grade 5)’ This obviously depends on how engaged they have been in this six weeks to success and how much they have ‘owned the learning’.

Benefits – remind learners of the benefits of gaining the minimum grade 4 required:

- **Looks great on their CV, skills that employers look for in recruiting**
- **Evidence shows you’re likely to earn more money than someone without their grade 4**
- **Make better life choices, eg financially, career-wise, in health**

Also remind them that they will have another opportunity to resit in the summer, with even more revision time, should they not yet be successful.



Contact us

Our team of subject experts are here to help and support you as you deliver our specifications.

We're here to provide advice when you need it and respond to queries you might have to make sure you feel confident about guiding your students to fulfil their potential.

We understand the trust you put in us to provide great assessments for your students and we are committed to delivering on this.

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