



HELSTON COMMUNITY COLLEGE

ASPIRATION · AMBITION · ACHIEVEMENT

Independent Learning Guide

Maths



Name:

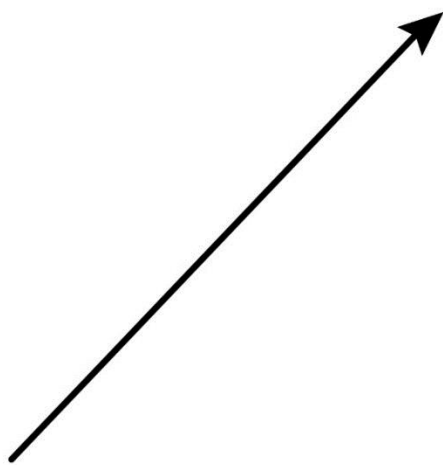
Targets

Minimum	Expected	Aspirational

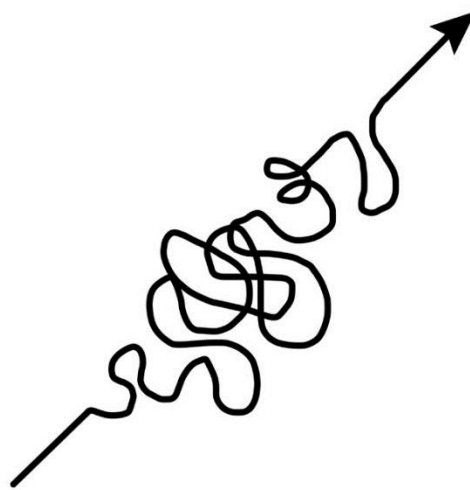


SUCCESS

SUCCESS



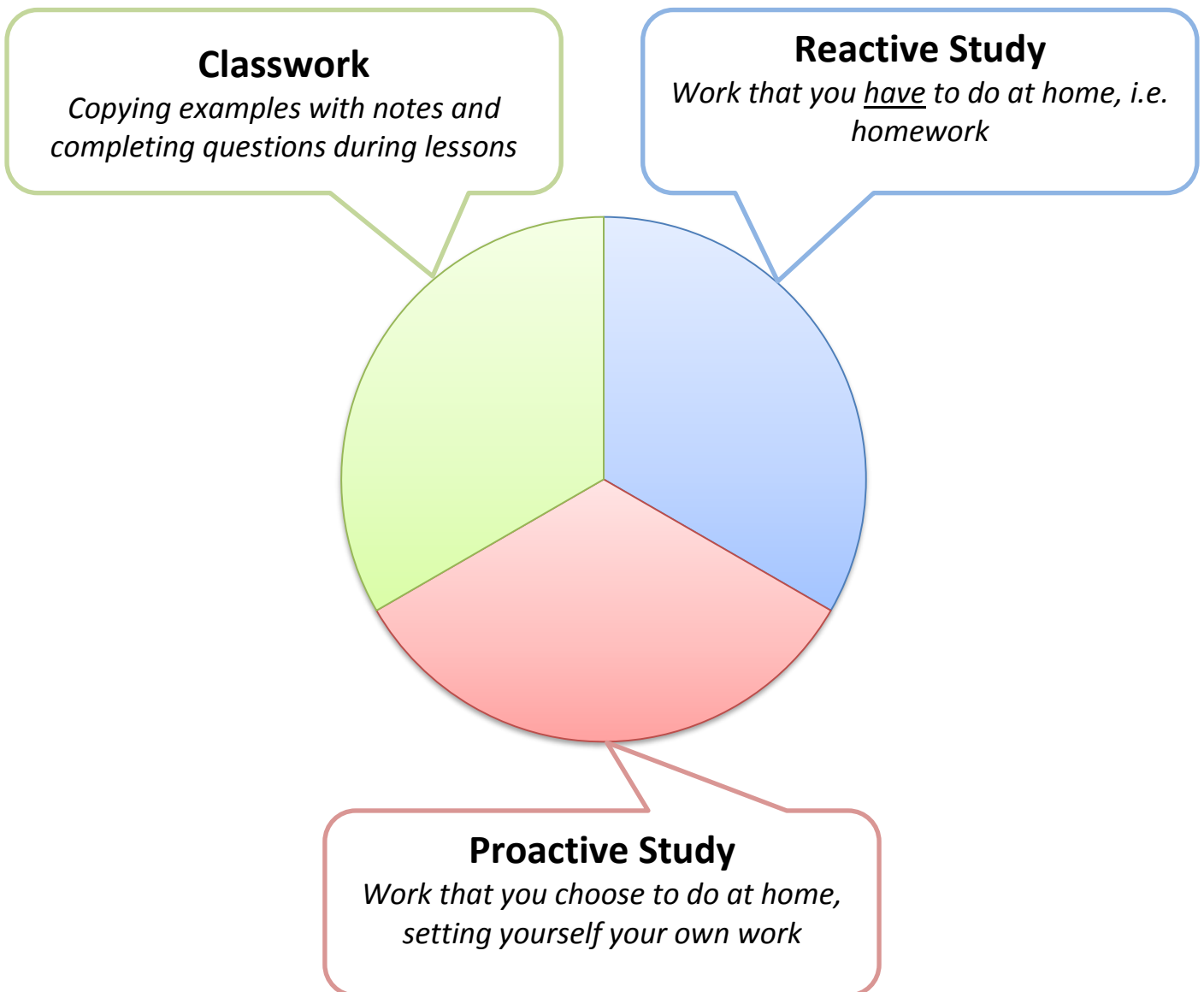
what people think
it looks like



what it really
looks like

Types of Work

Work can be broken down into two main categories, Classwork and Independent work. Most students do not realise that Independent work can be broken down into two types of work itself, Reactive and Proactive Study. Work that you have to do in your own time (your homework) is Reactive Study. Work that you choose to do in your own time is Proactive Study and is proven to help improve your chances of progressing.



Proactive study is the type of work that can have the greatest impact on your success. The following pages will provide advice and guidance for activities you can do for each type of work to ensure success.

Good Classwork Habits

Good Habits	Rationale
These can have a <i>positive</i> effect on your progress	
Copying full examples into your book	Copying examples is part of the learning process. If you do not write it down, the process does not start to build up in your muscle memory. By having the example in your book, you also give yourself something to refer back to when completing practice questions in lessons or at home.
Showing full workings, in the same format as the example	The format of the workings given in the example are your success criteria, so it shows you what yours should look like for each question. Trying to make up your own method or trying to do multi-step calculations in your head increases the amount of things you need to remember, so you are making it harder for yourself. Workings also make it easier for teachers to find where you are going wrong and therefore can help you more effectively if you make a mistake.
Completing as many practice questions as possible	Completing as many questions as possible builds the process into your muscle memory so you are more likely to remember it in the future. Off-topic chatting when you should be working not only means you get less practice, it also significantly reduces the chance of you remembering the topic because your focus is not on one thing.
Asking for help when you need it	Asking for help is one of the best ways to ensure that you understand as it identifies the stage of the work that is causing confusion and then specific advice can be given. Sitting there quietly doing nothing is not going to help, neither will just saying, "I don't get it". You need to get started on the question (which "I don't get it" people do not do), following the same workings as in the example. Once you have identified the stage that is causing confusion, then you can ask "what do I do once I've got to here?" You need to remember that the example and your notes should be your first place to get help.

Good Reactive Study (Homework) Habits

Good Habits	Rationale
These can have a <i>positive</i> effect on your progress	
Doing your homework early, identifying the questions you don't understand and asking for help on those specific questions	By doing your homework early it gives you more time to seek help on questions you struggle with. This then turns a Reactive Study Homework task in to a Proactive Study task! Once you have identified the questions you need help on, you must be proactive at doing something about it. You could speak to your teacher, go onto MathsWatch or attend Maths Support Club in C25 on Wednesdays 3:15-4:30pm.
Completing each task in full	It is important to complete each task in full. The temptation is to just do the easy questions and to avoid doing the harder ones. Seeking help, when necessary, will mean that you will address your misunderstandings and develop your knowledge.

Proactive Study Activities

The following is a list of activities that you can complete to proactively improve your progress.

Different activities can have a different impact on your progress. When completing proactive study you should not always be doing low impact activities. Make sure you are not always focusing on high impact activities all the time either, you need a mixture of each type consistently over a long period of time.

Low Impact Activities

Activity
Reading through class notes
Reading through textbook or revision guide
Making a mind map
Re-writing class notes
Highlighting key points/colour coding
Making flashcards
Creating a revision wall to display your learning
Watching a Mathswatch clip
Only completing the questions you already know how to do on exam papers
Making a list of topics you struggle with
Printing off worksheets/exam packs/exam papers (but not completing them)
Attending Maths Support sessions with no work

Medium Impact Activities

Activity
Completing a worksheet/past paper using notes/Mathswatch to help with questions you struggle with
Using your examples to show you how to present your answer
Working through worksheets/exam papers you have printed off
Completing a past paper, listing the topics of the questions you need support with

High Impact Activities

Activity
Using a mark scheme to mark your own exam paper
Working with a friend/group to complete an exam paper
Comparing your answers and workings to model answers
Creating your own exam questions
Asking for help on a specific stage of working
Planning to teach somebody else how to understand something you are having difficulty with

Useful information

Activity	Guidance
Maths support sessions	<p>Maths Support sessions take place on Wednesdays in C25 between 3:15pm and 4:30pm. When attending these sessions, you should be arriving with work.</p>
Prioritise topics to work on	<p>There are many individual topics within the Maths Curriculum. Similar topics have been grouped into modules. These modules are set up to help break the Maths Curriculum down in to smaller manageable chunks.</p> <ul style="list-style-type: none"> • Identify the questions that you got wrong (in class, on homework tasks, during assessments or on practice papers) • Identify the topics for these questions, if you don't know what the topic is: <ul style="list-style-type: none"> ○ Find similar questions in your exercise books/revision guide, the title will tell you the topic or ask ○ Use a QLA sheet to find the topic (if one has been provided) • High priority topics are going to be questions you got no marks on • Medium priority questions are going to be questions you got some marks on
Maths Watch Login Details	<p>MathsWatch Login Details To work out your username, you use the following</p> <p style="text-align: center;"><i>[Tutor Group][First 3 letters of first name][First 3 letters of surname]@helston</i></p> <p>So John Smith in tutor group 11B username will be <i>11bjohsmi@helston</i> Everyone's password is 'height'</p> <p>Write your log-in details here:</p> <p style="text-align: center;">_ _ _ _ _ @ helston</p>
Information about MathsWatch	<ul style="list-style-type: none"> • Go to www.mathswatch.co.uk/vle • Log in using your username and password • Click 'Videos' • Under 'Find a Clip', select 'GCSE' as the Qualification. • In 'Search' type in the clip number you are looking for • In the 'Choose Clip' box, select the clip you are looking for – this will bring up the video in the 'Video' box. <p>Now that you have the correct clip, look at the top right hand corner of the video box:</p> <ul style="list-style-type: none"> • Worksheet – if you click this, it will bring up a pdf that you can print off to complete • Interactive questions – if you click this, it will bring up some questions you can complete online and will be marked automatically when you click 'Submit Answer' <p>Use the video to make notes Watch the example, using the workings as model answers (you may need to pause it to copy this down)</p>

<p>Where to go to print off exam papers and mark schemes</p>	<ul style="list-style-type: none"> • Go to www.mathsgenie.co.uk • Click on the tab labelled 'GCSE Exam Papers' • Select the papers and mark schemes from this page, full worked solutions are also provided. <p>Exam Papers: (including specimen papers) make sure you practice Papers 1, 2 and 3 (1 is a Non Calculator paper, 2 and 3 are Calculator Papers) so you can get used to which topics appear on each type of paper.</p> <p>Mark schemes: are good for identifying which stages of workings earn you marks.</p> <p>Solutions: these demonstrate how your work should be laid out which is not always clear when looking at a mark scheme.</p>
<p>Where to go to print topic specific tasks</p>	<p>Maths Genie</p> <ul style="list-style-type: none"> • Go to www.mathsgenie.co.uk • Click on the tab labelled 'GCSE Revision' • Search for a topic you want to revise, you will want to find a topic that you have identified (do not just pick something at random or something too easy). The topics are organised by grade on this page. <ul style="list-style-type: none"> ○ <i>Revision</i> – these will take you to videos that will support you. Use these in the same way you would use the MathsWatch video ○ <i>Exam Questions</i> – these will take you a pdf containing a range of exam questions on that specific topic. Print off to complete at a later date. ○ <i>Solutions</i> – these show you the answers and how to present your workings. Unfortunately it does not specify how you would earn your marks. <p>Corbett Maths</p> <ul style="list-style-type: none"> • Go to www.corbettmaths.com • Click on the tab labelled 'Videos and Worksheets' • Search for a topic you want to revise, you will want to find a topic that you have identified (do not just pick something at random or something too easy). The topics are organised alphabetically on this page. <ul style="list-style-type: none"> ○ Video - these will take you to videos that will support you. Use these in the same way you would use the MathsWatch video ○ Practice Questions – these will take you a pdf containing a range of exam questions on that specific topic. Print off to complete at a later date. ○ Textbook Exercise – these are another pdf containing similar questions on the specific topic. No marks are allocated. • At the top of the 'Videos and Worksheets' page, there is link in pink writing 'Click here for answers'. This will take you to another page with links to the answers for most of the Practice Questions and Textbook Exercises (you will need to make a note of the video number of the topic you were working on) <p>Corbett Maths is also a good source of practice papers and the 5-a-day tasks are also useful so that you gain regular exam practice.</p>

