

Numeracy Parent Forum 2024



COMMITMENT • RESPECT • EXCELLENCE • SELF-BELIEF • STRENGTH

Why do so many of us say that we are useless at Mathematics ?

And why, as a society, is it considered acceptable?

If someone cannot read or write there is a social stigma attached



COMMITMENT • RESPECT • EXCELLENCE • SELF-BELIEF • STRENGTH

Numeracy is important for EVERYONE as it develops logical thinking and reasoning strategies in our everyday activities.

We need numeracy to solve problems and make sense of numbers, time, patterns and shapes for activities like cooking, reading receipts, reading instructions and even playing sport.

We ALL need numeracy to pay the household bills



The Modern Day Employee

94 % of all workers use some sort of Mathematics in their jobs.

68 % percent use fractions, decimals, and percentages.

More than a third of skilled blue-collar workers such as carpenters and mechanics use basic algebra on the job; 29 % percent use geometry and trigonometry.

<https://www.trade-schools.net/articles/jobs-for-math-majors>





For many people, GCSE Mathematics will be a gatekeeper – if you want to do a certain job, then you will need a good grade in GCSE Mathematics.

You might make an excellent police officer, but without GCSE Mathematics, lots of forces won't accept you





Don't let GCSE Mathematics be a barrier to further education

Under new government plans, students who fail GCSE English and Mathematics could be banned from taking out student loans

According to the Telegraph, around a third of students fail their English and Mathematics GCSE each year



COMMITMENT • RESPECT • EXCELLENCE • SELF-BELIEF • STRENGTH

The relationship between attitude towards Mathematics and learning outcomes is bidirectional.

A positive attitude towards Mathematics can lead to higher achievement, and high achievement can result in more favourable attitudes.



Mathematics anxiety is an extreme, yet all-too-common, example of what can happen with a negative attitude towards Mathematics.

Educational Studies in Mathematics considers Mathematics anxiety to be a feeling of tension and worry that interferes with a student's ability to solve Mathematical problems.



Those with Mathematics anxiety have extremely negative perceptions about their own ability to succeed in the subject, often thinking:

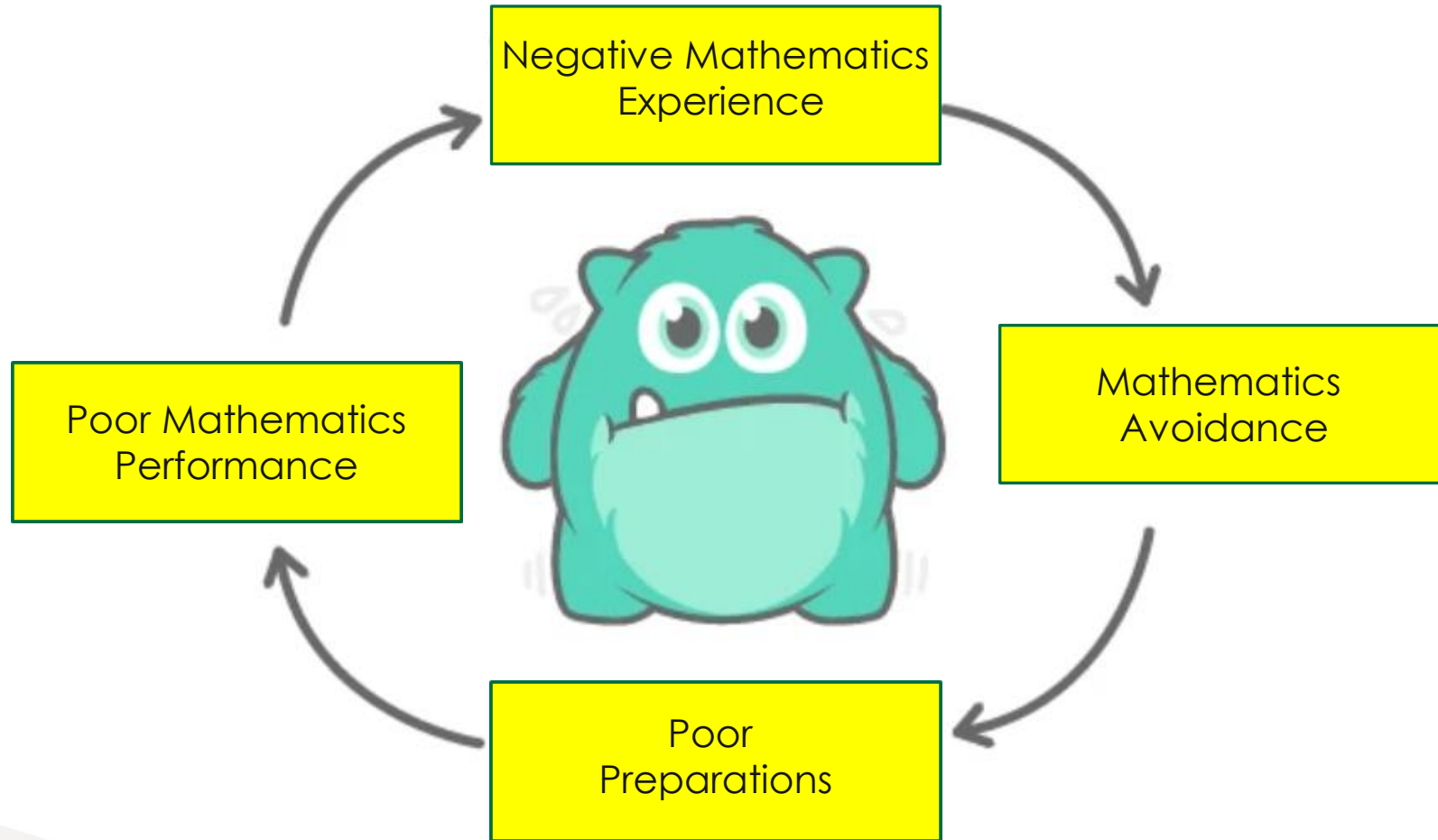
I hate Mathematics.

I just can't do Mathematics.

I'll never be good at it, so what's the point in trying?



Mathematics Anxiety Cycle of Failure



Attitude and achievement -- a bidirectional relationship

To improve student attitudes and achievement in Mathematics, it's important to understand the connection between the two.

At first glance, it might seem like an obvious correlation: if a student has a good attitude towards Mathematics, they'll be more inclined to learn, they'll try harder and their performance will be better.

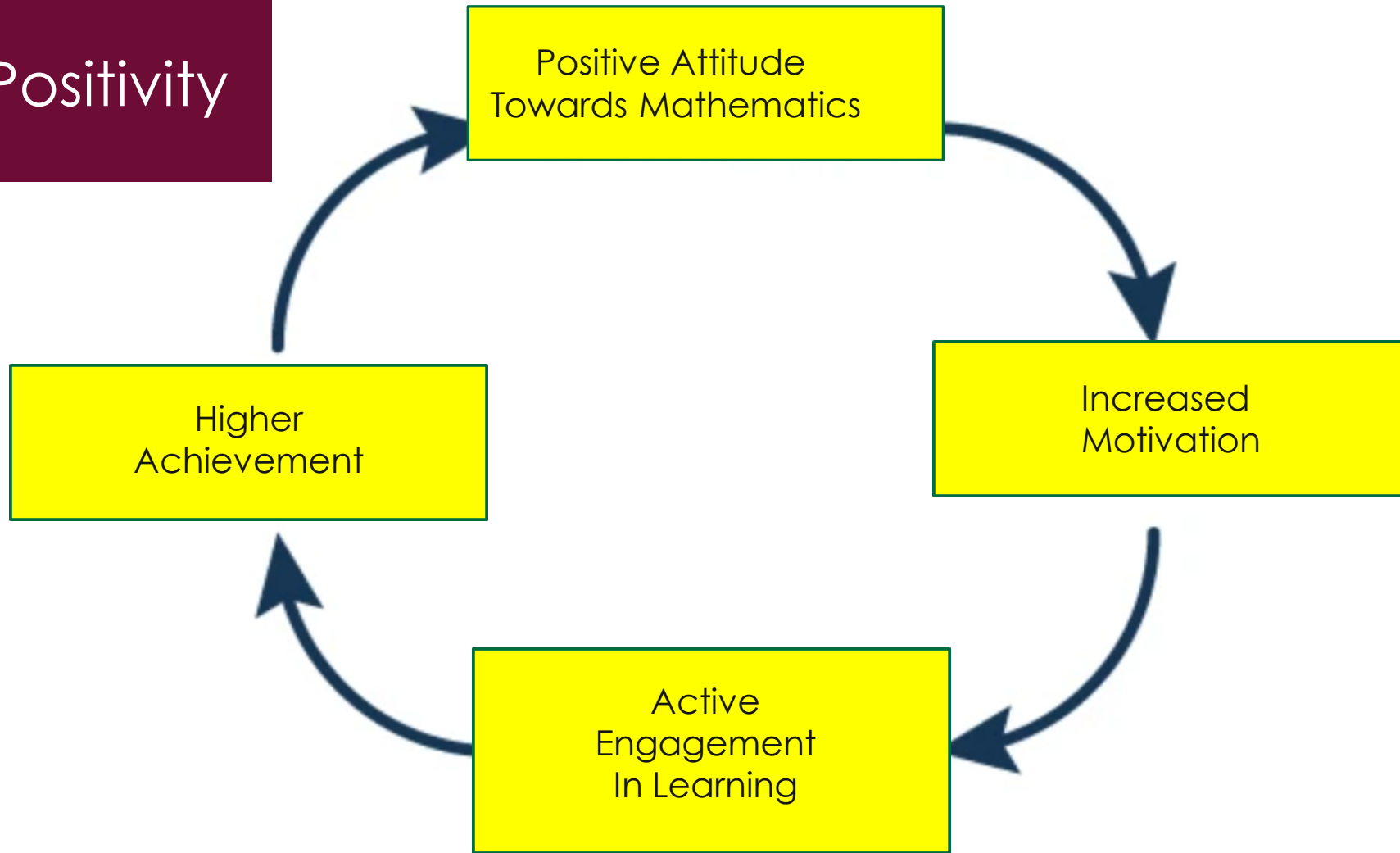


This bidirectional relationship can often result in a cycle of attitudes and achievement feeding into one another.

To improve attitudes and/or achievement, you need to break the Cycle of Failure and create one of positivity!



Cycle of Positivity



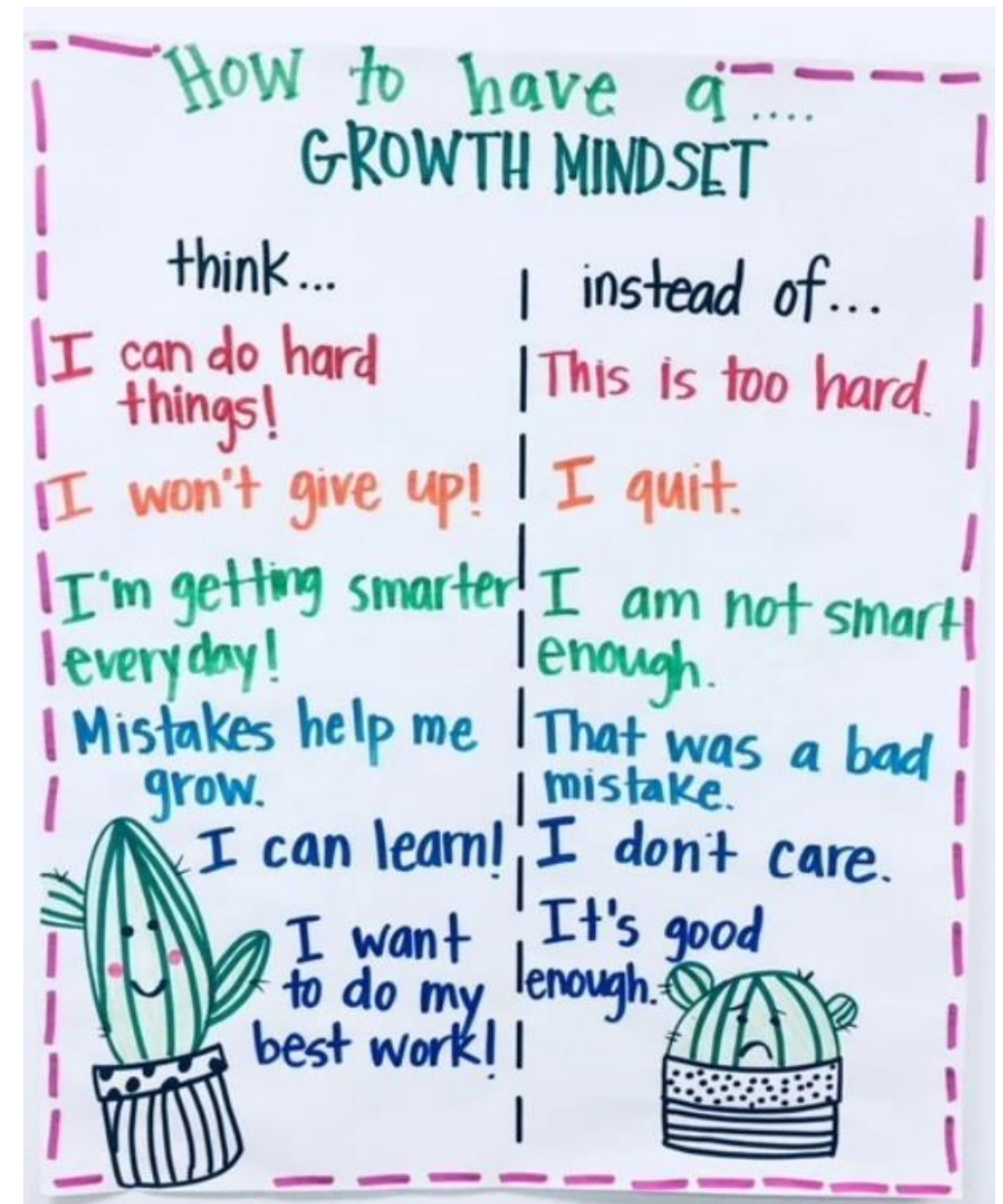
The importance of a positive attitude

Short-term achievement in Mathematics can be great, but positive attitudes can lead to so much more than a few good test scores.

Educators, parents and carers should instil positive attitudes in Mathematics not just for better performance in the subject, but also to create lifelong learners!



Improvements in each of these areas certainly contribute to greater learning abilities and educational outcomes, but they also make for healthier, happier students overall. This is why instilling positive attitudes and promoting a growth mindset as early as possible is so important.



6 Ways to Improve Your Child's Mathematics Skills:

Let them help you with the cooking and baking ...

Get them involved in the food shopping ...

Play Mathematics games with them at home ...


Read books that incorporate Mathematics ...

Encourage them to do some Mathematics every day...

Familiarise yourself with what your child is currently learning.



Familiarisation of Learning Content



Select Language ▼

search

HOME


PARENTS

STUDENTS

CONTACT US

POST 16

shaping the
future



Admissions

Attendance

Beginning Year 7

Behaviour & Expectations

Covid 19

Curriculum

E-Safety for Parents

Future Gateways

Girls on Board

Homework & Revision Centre

Leading Parental Partnership Award

Letters Home

Literacy at Belfairs

Lost Property

Merchandise



Parent Pay

Parent View




Parents' Forum

Reports, Marking and Assessment

Safeguarding



Year 7 & 8 Curriculum



<https://www.belfairsacademy.org.uk/parents>

Upcoming Events

02.03.2022
Parent Forum - Literacy and Numeracy

23.03.2022
Reports go home to parents

23.03.2022

COMMITMENT • RESPECT • EXCELLENCE • SELF-BELIEF • STRENGTH

Familiarisation of Learning Content

Belfairs Academy

Mathematics Fundamentals Year 7



Art



Computing



English



Geography



Maths



MFL



Music



Knowledge	Skills
Number <ul style="list-style-type: none"> To be able to identify factors and factor pairs To understand prime numbers and powers To apply the four operations with integers, fractions, decimals and negative numbers BIDMAS and order of operations Understanding percentages and calculating percentages of amounts Rounding to the nearest 10, 100, 100 and to two decimal places 	Cognitive skills <ul style="list-style-type: none"> Non-routine problem solving – expert thinking, metacognition, creativity. Systems thinking – decision making and reasoning. Critical thinking – definitions of critical thinking are broad and usually involve general cognitive skills such as analysing, synthesising and reasoning skills. ICT literacy - access, manage, integrate, evaluate, construct and communicate.
Knowledge	Skills
Geometry & Measures <ul style="list-style-type: none"> Understand perimeter and area and calculate these of 2-D shapes including circles Conversion between metric units Measuring and drawing angles Determine missing angles on a straight line, around a point, in a triangle and in a quadrilateral. 	Interpersonal skills <ul style="list-style-type: none"> Communication – active listening, oral communication, written communication, assertive communication and non-verbal communication. Relationship-building skills – teamwork, trust, intercultural sensitivity, service orientation, self-presentation, social influence, conflict resolution and negotiation. Collaborative problem solving – establishing and maintaining shared understanding, taking appropriate action, establishing and maintaining team organisation

Support for Your Child

Sparx Maths

Home

Teachers & Leaders ▼

Sparx Curriculum

News & Updates ▼

Register interest

Log in ▼

Now Live!

FREE - Sparx Maths Curriculum

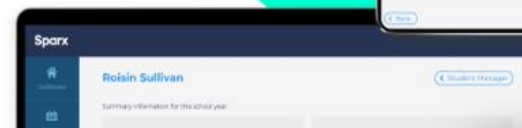
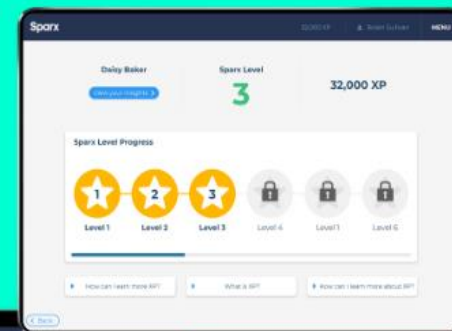
An intelligently sequenced 5-year curriculum for Y7 to Y11

Teacher login

Student login

Find out more

Personalised
maths
homework,



Sparx Maths

Student Login

You're logging in to Sparx at **Belfairs Academy**.

[Not your school?](#)

Use your Sparx login

Username:

Password:

[Show](#)

[Forgotten Sparx login details?](#)

Log in

[New Sparx user?](#)

First Name

Surname

Date of Birth

Click on NEXT

Student to create own password

Click on NEXT again

You will be asked to check details

By putting in:

Username - FirstnameSurname

Example: JohnSmith

Then password

Students MUST watch intro videos



COMMITMENT • RESPECT • EXCELLENCE • SELF-BELIEF • STRENGTH

Sparx Maths

Student Login

You're logging in to Sparx at **Belfairs Academy**.

[Not your school?](#)

Use your Sparx login

Username:

Password:

[Show](#)

[Forgotten Sparx login details?](#)

Log in

[New Sparx user?](#)

Forgotten Password

Teacher is sent email to allow password reset

Student will then need to set themselves up as a new Sparx user

As per previous slide



COMMITMENT • RESPECT • EXCELLENCE • SELF-BELIEF • STRENGTH

Click on My Homework for assigned tasks



Sparx Maths9843 XP

My Homework

Independent Learning

✓

Homework due Wednesday
10th January 3pm

✓

✓

Homework due Wednesday
3rd January 3pm

✓

✓

Homework due Wednesday
27th December 3pm

✓

✓

Homework due Wednesday
20th December 3pm

✓

✓

Homework due Wednesday
13th December 3pm

✓

✓

Homework due Wednesday
6th December 3pm

✓

✓

Homework due Wednesday
29th November 3pm

✓

★
Compulsory

⚡
XP Boost

👑
Target



Progress and completed tasks record

Sparx Maths9843 XP

My Homework

Independent Learning

Homework due Wednesday 10th January 3pm

1. Calculating with pressure100%Complete ✓

2. Mixed problems: Calculating density and pressure100%Complete ✓

3. Frequency trees100%Complete ✓

4. Tree diagrams for independent events100%Complete ✓

5. Tree diagrams for dependent events100%Complete ✓

Compulsory

XP Boost

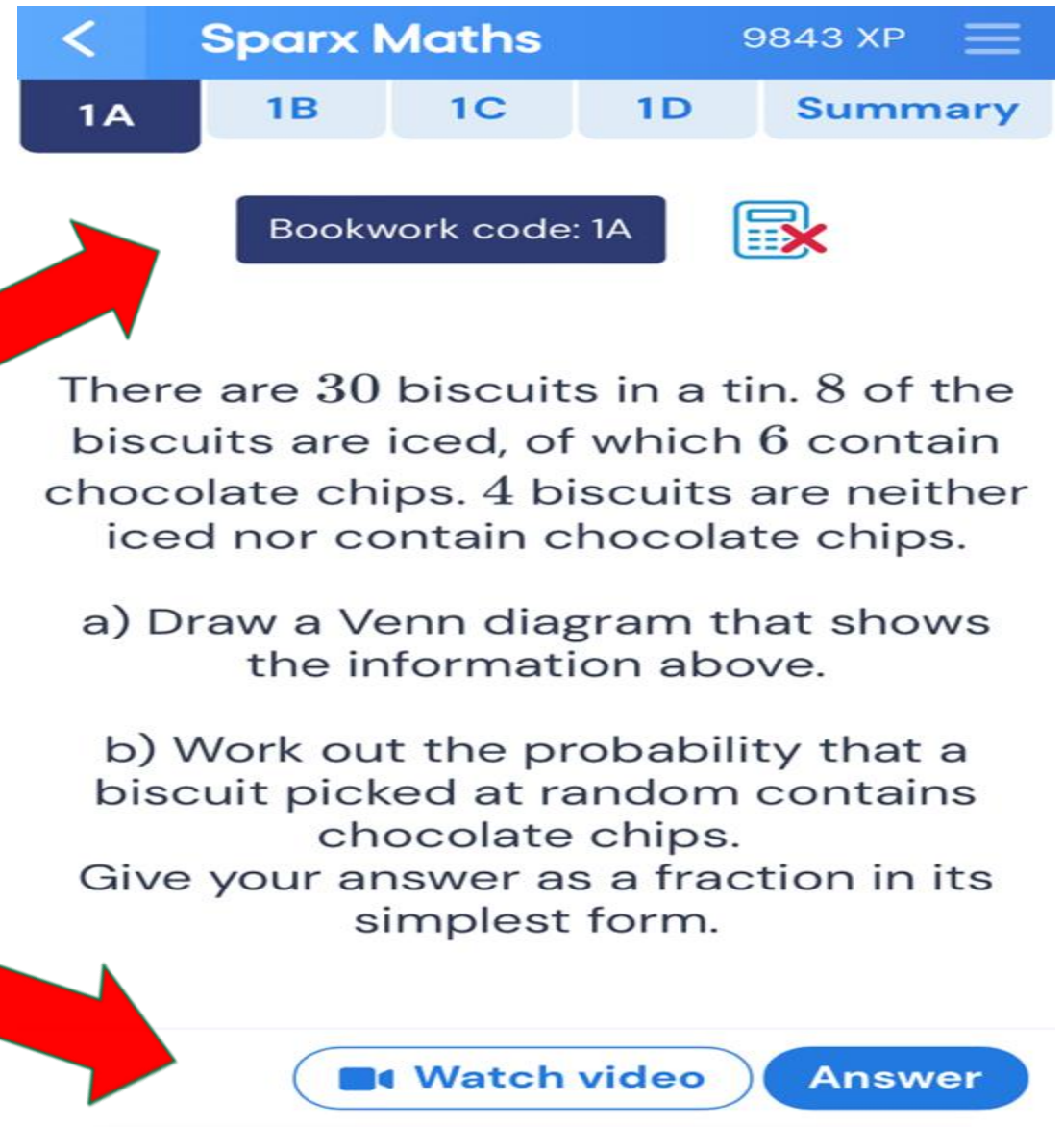
Target

COMMITMENT • RESPECT • EXCELLENCE • SELF-BELIEF • STRENGTH

Students need to write Bookwork codes down on a piece of paper as they will be asked for the codes during the homework to check on their engagement

Videos provided to support learning

Answers provide instant feedback



The screenshot shows the Sparx Maths app interface. At the top, there is a blue header with a back arrow, the text "Sparx Maths", and "9843 XP" with a menu icon. Below the header is a navigation bar with tabs labeled "1A", "1B", "1C", "1D", and "Summary". The "1A" tab is selected. Below the navigation bar, there is a dark blue box containing the text "Bookwork code: 1A" and a calculator icon with a red 'X' over it. The main content area displays a word problem: "There are 30 biscuits in a tin. 8 of the biscuits are iced, of which 6 contain chocolate chips. 4 biscuits are neither iced nor contain chocolate chips." Below the problem are two questions: "a) Draw a Venn diagram that shows the information above." and "b) Work out the probability that a biscuit picked at random contains chocolate chips. Give your answer as a fraction in its simplest form." At the bottom of the screen, there are two buttons: "Watch video" (with a video icon) and "Answer".

< Sparx Maths 9843 XP

1A 1B 1C 1D Summary

Bookwork code: 1A

There are 30 biscuits in a tin. 8 of the biscuits are iced, of which 6 contain chocolate chips. 4 biscuits are neither iced nor contain chocolate chips.

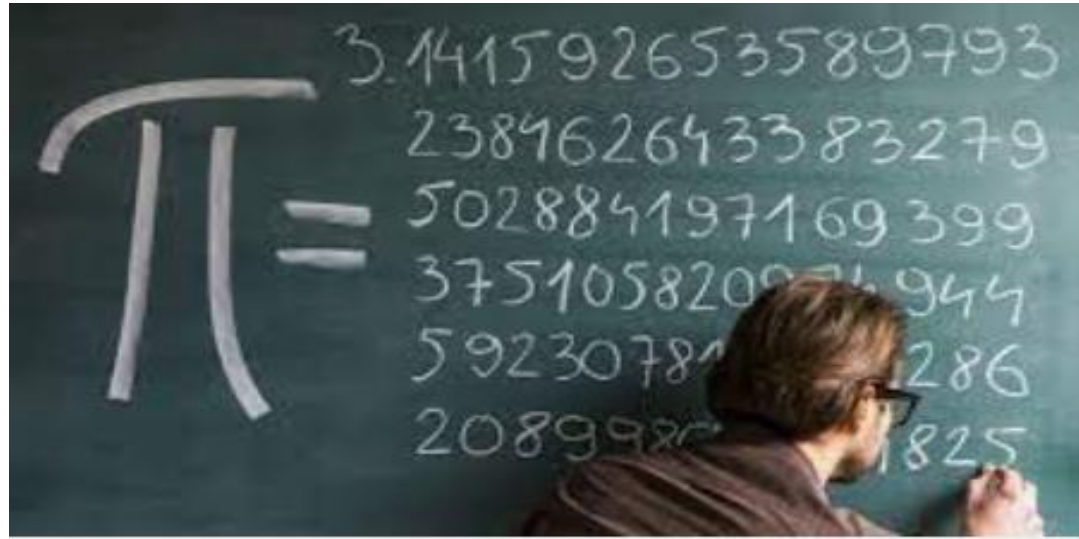
a) Draw a Venn diagram that shows the information above.

b) Work out the probability that a biscuit picked at random contains chocolate chips. Give your answer as a fraction in its simplest form.

Watch video Answer



Mathematics Homework Club



Every Thursday

Room: 4G05

2:45 pm – 4 pm



Useful websites:

<https://www.mathsgenie.co.uk/>

<https://www.bbc.co.uk/bitesize/subjects/z6vg9j6>

<https://sparxmaths.com/>

<https://corbettmaths.com/>

<http://www.gojimo.com/>

<http://www.mrbartonmaths.com/index.html>

<https://www.piximaths.co.uk/>

<https://www.dr frostmaths.com/>

Pearson Edexcel is the exam board studied at Belfairs Academy



COMMITMENT • RESPECT • EXCELLENCE • SELF-BELIEF • STRENGTH

Please

Support your child's learning by talking positively about Mathematics

Thank you for your time and continued support

Quote:

Without Mathematics, there's nothing you can do.
Everything around you is Mathematics.
Everything around you is numbers."

- Shakuntala Devi

