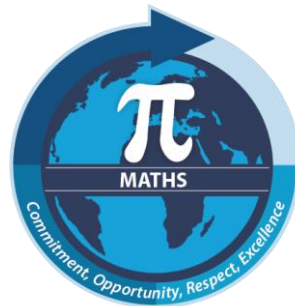


# Equipping Parents to Support their Child With Revision



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# Key staff to contact

- First port of call- **your Child's Tutor**
- Head of Y10 is **Mr. Butler**
- SLT Strategic Lead for KS4- **Mr. Atkins**





# North Leamington School

*...believe and you will achieve*

6-7.15PM

## STRUCTURE-

- STRATEGIES OF SUPPORT
- ENGLISH
- MATHS
- SCIENCE
- RE
- QUESTIONS ON WAY OUT





# North Leamington School

*...believe and you will achieve*

**SUPPORTING YOUR  
CHILD WITH  
REVISION  
STRATEGIES**

**MR ATKINS**

**SENIOR ASSISTANT  
HEADTEACHER  
(KS4 STRATEGIC  
LEAD)**



# Is KNOWLEDGE embedded in Long Term Memory?



How well do you know the 50p coin?  
You have seen it thousands of times,  
so you should know all about it. Think  
about the front of a 50p coin.

There is an image of Britannia.

1. What is in her left hand?
2. What is in her right hand?
3. What is on the shield?
4. What is on her head?
5. What is at her feet?





We have seen the coin many times ('shallow repetition') but we have not **thought** about it. Therefore we are familiar with it but the knowledge is not embedded in our LTM!





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To ensure information is stored in the long term memory:

Embed the content

Make it meaningful and useful

Grow, extend and build on knowledge

TO ENSURE...

THROUGH...

BY ENCOURAGING ...

Knowledge and understanding

Analysis and application

Flexibility of thinking

REDUCE

DECONSTRUCT

PRIORITISE AND CATEGORISE

TRENDS AND PATTERNS

MAKE CONNECTIONS

EXTEND AND CREATE

TRANSFORM

DERIVE

CRITICISE

PRACTISE

COMPARE

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# Cognitive Load- We can only take so much!



- Break down topics into smaller parts. This reduces the problem space and lightens the cognitive load, making learning more effective.
- Support your child to review information from their lessons as they go along because this will help improve their retention, adding knowledge to their long-term memory. Help them get into a routine which works for them.

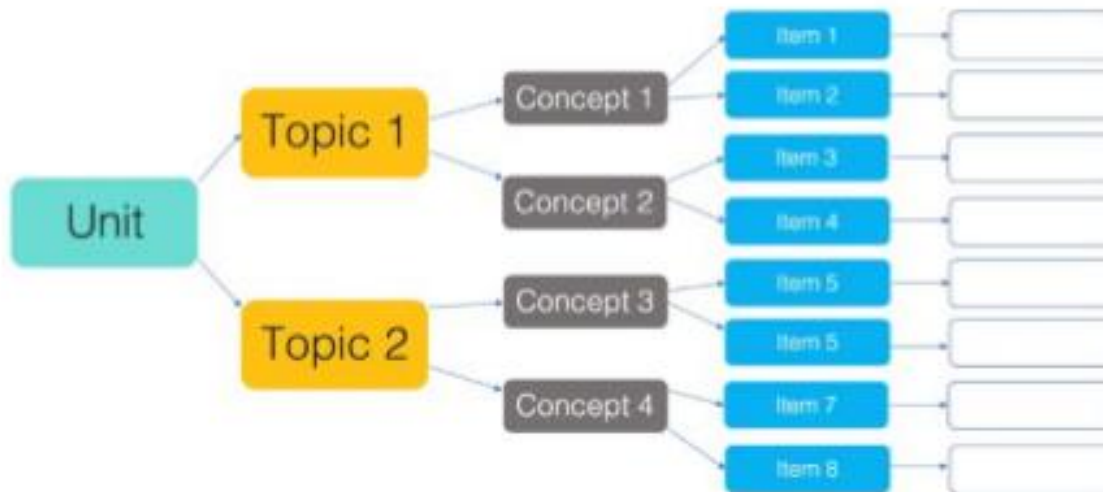


# CHUNKING TECHNIQUE



## The Process

1. Break down larger amounts of information into smaller units.
2. Identify similarities or patterns.
3. Organise the information.
4. Group information into manageable units.

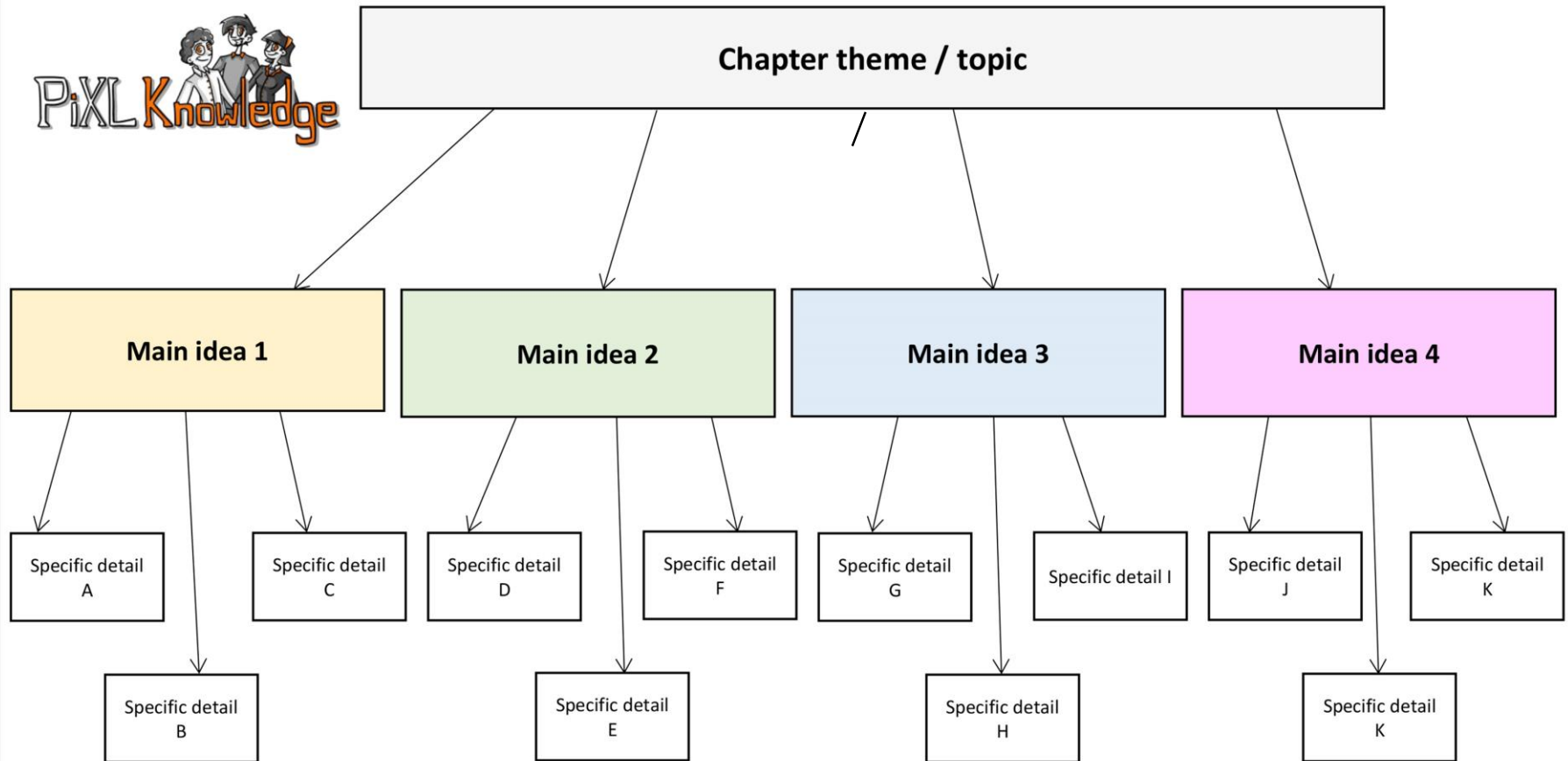


Use **HEADINGS** and **TITLES** for different sections

Use **TABLES** to summarise **LARGE AMOUNTS** of DATA

Use **BULLET POINTS** to summarise and **CLARIFY** IMPORTANT POINTS

Combine quick **ILLUSTRATIONS** with **TEXT** to create **VISUAL ASSOCIATIONS**

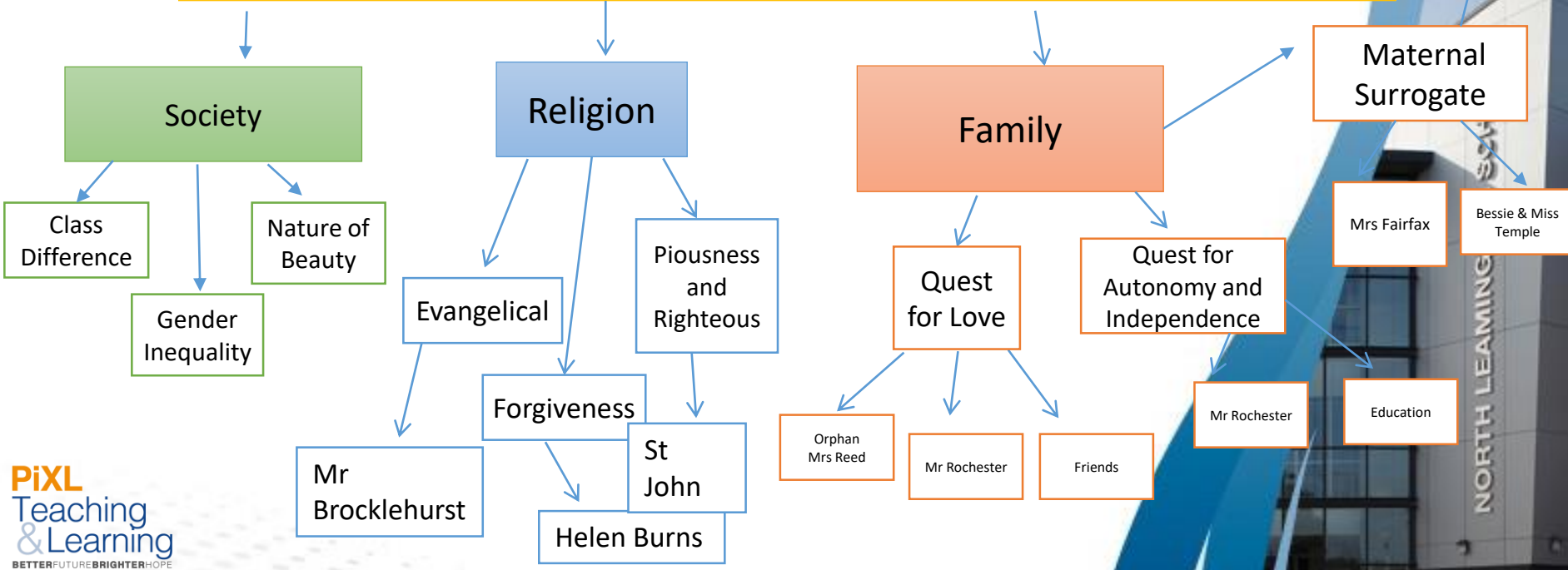


Taken from the article: 'What Will Improve a Student's Memory?' By Daniel T Willingham  
[http://www.aft.org/sites/default/files/periodicals/willingham\\_0.pdf](http://www.aft.org/sites/default/files/periodicals/willingham_0.pdf)

Deconstruct: Make a large amount of learning manageable.



# Jane Eyre



# Flashcards- Strategies

- Try testing your child using the flashcards and give them time to digest the question before answering. If they get the answer right, don't discard the card – they need to keep repeating it again and over time.
- When using the flashcards, help your child review their cards using an organised system.



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# FLASHCARDS- REPETITION



## Using a system

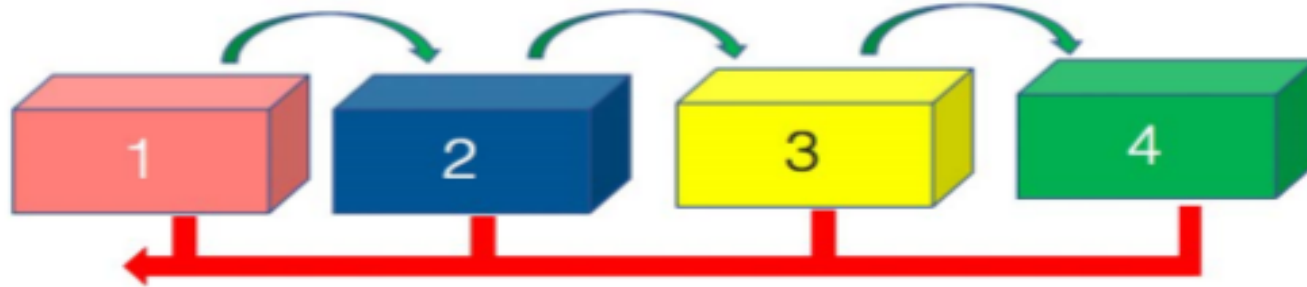
The Leitner system is a well-known and very effective method of using flashcards. It's a form of spaced repetition that helps you study the cards you don't know more often than the cards you already know well.

All flashcards start off in box/stack 1. As you review the cards, each card you answer correctly goes into box 2.

If you give the wrong answer the card stays in box 1.

When you review cards in box 2, if you still get it right you move the card to box 3 and so on until all cards are in box 4.

If you get a card wrong in any box, it goes back to box 1.



The key is that the cards you know less well are reviewed more frequently than the cards in the higher boxes. You now must choose the frequency at which you review each box.

**For example** - Box 1: Every day, Box 2: Every 2 days, Box 3: Every 3 days, Box 4: Every 4 days

# The Interleaving Technique



- Work with your child to create a revision timetable which spaces their topics out across a good period of time.
- Start with 20 minute bursts and then build up to 45 minute sessions. But then have a break and change the topic for the next burst. Keep returning to previous sections, time and time again.



<b>TIMES</b> <b>12 HOURS A WEEK</b>	<b>8.30 – 3.15 SCHOOL</b>	<b>3.20 – 4.05pm INTERVENTION CLASSES</b>  <b>Travel Home</b>	<b>5 – 5.45pm</b>  <b>Revision / Home Learning</b>	<b>6-7pm</b>  <b>Dinner/Family Time</b>	<b>7.00- 7.45pm</b>  <b>Revision/ Home Learning</b>	<b>8pm onwards</b>  <b>Chill Time</b>
MONDAY		HISTORY			MEDIA	
TUESDAY	DTTR-ENGLISH	GCSE PE	ENGLISH LIT			
WEDNESDAY	DTTR-ENGLISH	SCIENCE/BUSINESS	MATHS TUTOR		ENGLISH LANG	
THURSDAY	DTTR-ENGLISH	DRAMA/MATHS			CHEMISTRY	
FRIDAY						
<b>TIMES</b>	<b>9.00 -10.45 AM</b>	<b>11.00 – 12.45PM PM</b>	<b>1.00- 2.45PM</b>	<b>3.00- 4.45PM</b>	<b>5.00- 6.45PM</b>	<b>7.00-8.45PM</b>
SATURDAY	SESSION 1- MATHS/ENGLISH EXAM PAPER					
SUNDAY		SESSION 2- SCIENCE/BUSINESS EXAM PAPER		SESSION 3- HISTORY/MEDIA EXAM PAPER		



TIMES  <b>6-8 HOURS A WEEK</b>	<b>8.30 – 3.15 SCHOOL</b>	<b>3.20 – 4.05pm INTERVENTION CLASSES</b>  Travel Home	<b>5 – 5.45pm</b>  Revision / Home Learning	<b>6-7pm</b>  Dinner/Family Time	<b>7.00- 7.45pm</b>  Revision/ Home Learning	<b>8pm onwards</b>  Chill Time
MONDAY			RE Paper 1 Relationships and Life and death			
TUESDAY					RE Paper 2 Christianity	
WEDNESDAY						
THURSDAY		RE revision class			RE Paper 3 Islam	
FRIDAY			RE Paper 1 Good and evil and Human rights			
TIMES	<b>9.00 -10.45 AM</b>	<b>11.00 – 12.45PM PM</b>	<b>1.00- 2.45PM</b>	<b>3.00- 4.45PM</b>	<b>5.00- 6.45PM</b>	<b>7.00-8.45PM</b>
SATURDAY	RE Paper 1 All units					
SUNDAY	RE Paper 2 Christianity			RE Paper 3 Islam		

# Spacing and Timing of Revision



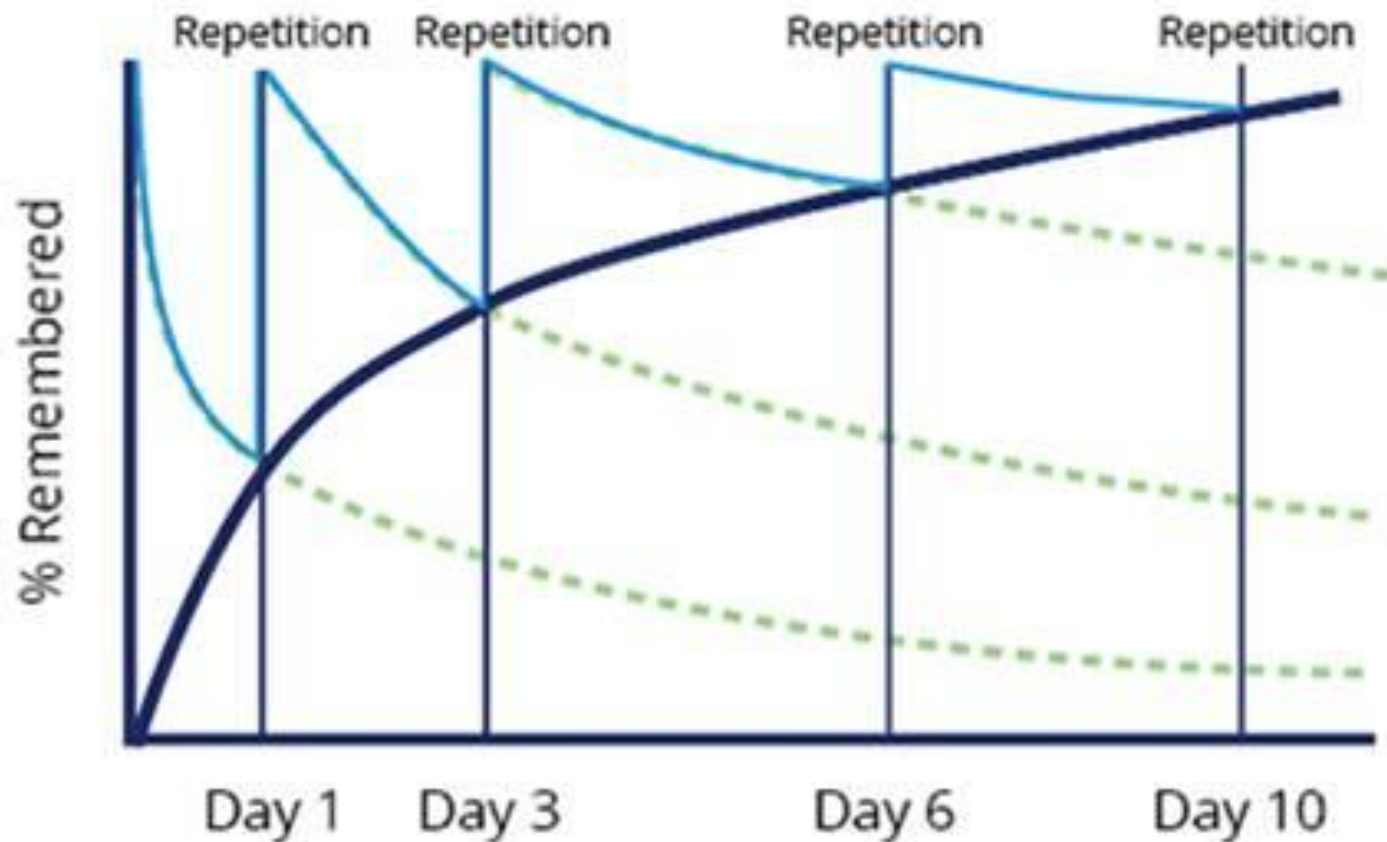
- Time intervals built into the revision sessions are crucial as well as spacing out the days.

This technique aids repetition and cements understanding through the Cognitive process.

- Help your child find the 'optimal gap' between sessions to aid maximum retaining of information.



# Spaced Repetition



# Keeping Active during Revision



- Encourage your child to do something active with their breaks.

Even 15 minutes of being active impacts positively on improving the Cognitive Brain Function.

- Overall Care- eating, sleeping, relaxing, socialising and down time must be catered for as well.

# Flipped Learning Technique



- Encourage your child to be proactive by thinking ahead and asking the teacher which topics are coming up next so they can actively start to understand them.
- *Recap of previous work/study of future work/current daily practice of understanding through homework.*
- *Help your child to take responsibility for their own learning, prioritise work, set targets and tweak good routines.*



# Three different types of homework

- Ongoing Homework to show understanding-many different forms.
- Flipped learning activities.
- Revision of previous material through a revision timetable.

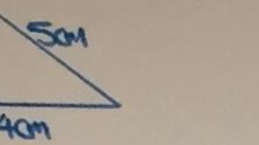


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$(x^7 + x^5)$

angles  
 $\frac{1}{2} \times \text{base} \times \text{height}$

$\frac{1}{2} BH$



$4 \times 3 = 6 \text{cm}^2$

$4 + 5 = 12 \text{cm}$

boards  
 $xH$   
 Area

$2 \times 8 \times 1.5 + 2 \times 8$

$2 + 2 \times 2 \times 1.5$

$(x+2)(x+6)$

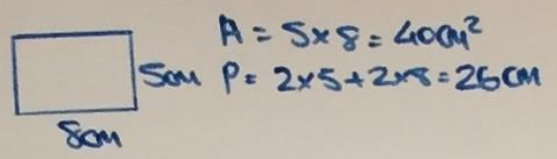
$x$	$x$	$+2$
$x$	$x^2$	$+2x$
$+6$	$+6x$	$+12$

$x^2 + 2x + 6x + 12$   
 $x^2 + 8x + 12$

Area Volume 1.

Area of a rectangle  
 = length  $\times$  width  
 $A = l \times w$

Perimeter of a rectangle  
 $P = 2 \times \text{length} + 2 \times \text{width}$   
 $P = 21 + 20$



Area Volume 2

C of Circles  
 Circumference of circles =  $2\pi r$   
 =  $\pi D$   
 Area of a circle =  $\pi r^2$

Power, Roots, Indices

$5 \times 5 = 5^2$  - squared  
 $5 \times 5 \times 5 = 5^3$  - cubed

Roots	Squared	
$1^2 = 1$	$8^2 = 64$	$15^2 = 225$
$2^2 = 4$	$9^2 = 81$	$1^3 = 1$
$3^2 = 9$	$10^2 = 100$	$2^3 = 8$
$4^2 = 16$	$11^2 = 121$	$3^3 = 27$
$5^2 = 25$	$12^2 = 144$	$4^3 = 64$
$6^2 = 36$	$13^2 = 169$	$5^3 = 125$
$7^2 = 49$	$14^2 = 196$	$10^3 = 1000$
		$11^3 = 1331$

RATIO

Unitary form = 1:N  
 $5:9$  uni form

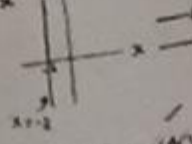
Sarah James John = £300  
 In ratio : 3:4:5  
 $3 + 4 + 5 = 12$  (parts)

$\div 5 (5:9) \div 5$

ions

(x) + right - int  
(y) + up - down

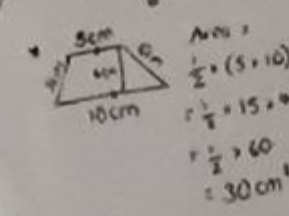
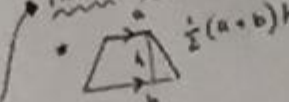
the line



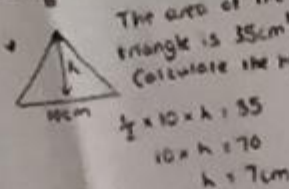
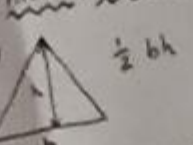
90/180 CW/ACW  
centre of rotation

scale factor  
centre of enlargement

Area of trapezium

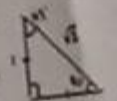


Area of triangles



Common trig values

	sin	cos	tan
0	0	1	0
30°	1/2	√3/2	1/√3
45°	1/√2	1/√2	1



Foundat

Fractions, decimals

- $\frac{1}{2} = 0.5 = 50\%$
- $\frac{1}{4} = 0.25 = 25\%$
- $\frac{1}{8} = 0.125 = 12.5\%$
- $\frac{3}{4} = 0.75 = 75\%$
- $\frac{1}{3} = 0.3 = 33.3\%$
- $\frac{2}{3} = 0.6 = 60\%$
- $\frac{1}{10} = 0.1 = 10\%$

Multiplying decimals

•  $54 \times 2.81$   
 $281 \times 54 = 15174$   
 $2.81 \times 5.4 = 15.174$

x	200	80	1
50	10000	4400	50
4	800	320	4

Dividing by decimals

•  $96 \div 0.2 = 480$   
 $960 \div 2 = 480$

•  $1.245 \div 0.05 = 24.9$   
 $1245 \div 5 = 249$   
 $0.249 \div 0.01 = 24.9$

Indices (powers)

- $2^4 = 2 \times 2 \times 2 \times 2 = 16$
- $13^2 = 13 \times 13 = 169$
- $3^2 \times 3^3 = 3^5 = 243$
- $5^2 \times 5^3 = 5^5 = 3125$

•  $2\frac{1}{2} + \frac{1}{3} = \frac{5}{2} + \frac{1}{3} = \frac{15}{6} + \frac{2}{6} = \frac{17}{6} = 2\frac{5}{6}$

•  $\frac{9}{10} - \frac{1}{6} = \frac{27}{30} - \frac{5}{30} = \frac{22}{30} = \frac{11}{15}$

•  $5\frac{1}{3} \times 2\frac{1}{2} = \frac{16}{3} \times \frac{5}{2} = \frac{80}{6} = 13\frac{1}{3}$

•  $\frac{11}{12} - \frac{3}{4} = \frac{11}{12} \times \frac{4}{3} = \frac{44}{36} = \frac{11}{9} = 1\frac{2}{9}$

Number

Rounding

- 28,368.9395
- Nearest 1000 = 28000
  - Nearest 100 = 28400
  - Nearest 10 = 28370
  - Nearest integer = 28369
  - 1dp = 28368.9
  - 2dp = 28368.94
  - 3dp = 28368.940
  - 4dp = 28368.9395
  - 1sf = 30000
  - 2sf = 28000
  - 3sf = 28400
  - 4sf = 28370

Estimation

• Round each value to 1sf.  
 • Estimate the value of:  $\frac{27.8 \times 2.49}{0.048}$

$\approx \frac{30 \times 2}{0.05} = \frac{60}{0.05} = \frac{6000}{5} = 1200$





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