P6 Cuiken Primary Home Learning Grid

Literacy – Reading	Literacy – Writing / Grammar	Numeracy
Reading Comprehension *I can read for information to answer questions on a topic.* Mary Sommerville is an interesting figure from Scottish history- this task links to both our recent Scottish focus and to our knowledge about numeracy and maths. For this task **choose one** from mild, spicy and hot then read and answer the questions. **AR- Book report** *I can share my opinions of the books I read* I know a lot of you have been reading your AR books and taking AR tests online. I would love to hear about the books you have been reading. This week please complete the book report below or in the classroom to share your opinions of a book you have read.	**Writing- Newspaper report** *I can write a newspaper report* Last week on 20th January Joe Biden became the oldest president of the USA and Kamala Harris the first woman and first woman of colour to become Vice President. Your task this week is to write a newspaper article about the inauguration that took place in Washington DC when Joe Biden and Kamala Harris were sworn in. Use the template on Google Classroom or do this in your jotter. There is also a planning document and video in Google Classroom to help you. **Success Criteria** Include; -a headline, - a quote, - a caption, -a picture (you may be able to cut and stick but miss it out if this causes problems) -In your first paragraph you should answer the six questions: who, where, why, when, what and how. -In the following paragraphs you should write in much more detail about what	**Fractions/ Decimals/ Percentages** Choose your task below or complete in our Google Classroom. **Mild** *I can identify where fractions lie on an empty number line* **Spicy** *I can identify where simple decimal fractions lie on a number line* **Hot** *I can find simple percentages of quantities* **Sizzling** *I can work out any % of an amount using my knowledge of percentages (eg 30% = 10% + 10% +10%)*

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	happened. You could mention the insurrection that happened and how Donald Trump has been impeached – he left the White House without showing Joe Biden around and should have been at the ceremony but chose not to attend. You might also want to include that Lady Gaga sang the American National Anthem and Jennifer Lopez sang 'This is Your Land' and 'America the Beautiful'. You might also say that there were other former US presidents there for the ceremony. There was a firework display where Katy Perry sang her track Firework later. There is a Newsround report here to help you research. **Grammar- VCOP** (Vocabulary, Connectives. Openers, Punctuation) *I can use a range of techniques to enhance my writing.* There are four VCOP challenges this week- complete one a day for four days or complete them all at once. The challenges are below or complete the template in our Google Classroom.	**Daily Ten** *I can use a range of operations to solve numerical patterns* Try the daily ten numeracy challenge. Each day choose a different category and pick your level- you can adjust this if the topics that come up seem too easy or too hard. Challenge- Can you do more than ten questions each day?

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Maths	HWB	French
Area *I can create shapes with a given area* Play this area game, it has six levels- at level one you can practice your area knowledge- by level six you can also make use of your perimeter and fractions knowledge! Click on the game tab to play the game. **Volume** The volume is the amount of space an object takes up, the volume of containers is often described by how much they can hold. There is a video in your Google classroom to explain how to calculate the volume of 3D objects. The tasks can be completed below or in our classroom. **Mild** *I can calculate the volume of cubes and cuboids by counting* **Spicy** *I can calculate the volume of cubes and cuboids* **Hot** *I can solve problems involving volume*	**PE- Sevens** I can throw and catch in a sequence In this game you throw a tennis ball (or similar) against a wall and do different actions for each step from 7 down to 1. 7 x Throw the ball against the wall and catch it. 6 x Throw the ball so it bounces off the ground and hits the wall, then catch it without letting it hit the ground again. 5 x Pat-bounce the ball on the ground five times non-stop 4 x Hold your leg up and throw the ball underneath it so it bounces off the wall. Catch it without letting it touch the ground. 3 x Throw the ball against the wall, and as it comes back pat-bounce it three times. 2 x Throw the ball against the wall. Clap your hands in front, behind, then in front again and catch the ball without letting it touch the ground. 1 x Throw the ball in the air and catch it.	**French Fridays!** *I can follow instructions in French* Tune in on Friday at 11am to enjoy a free live French lesson! The sessions are recorded so can also be watched afterwards. This week the theme is **French Dance Party** Finish the term with a fun dance in French! Learn the moves and take part in the dance. **Le Shopping** *I can write a shopping list in French* Watch this video about French groceries. Then you can try some games to practice. This week try adding three things to your family shopping list in French.

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	Outdoor Learning This week we are investigating numbers outdoors. When you are out walking try to notice all the numbers in the environment. -Look at the patterns of door numbers- are they following an odd/ even pattern or something else. -Look for dates on buildings- this can tell you something about the history of your local area- see how the buildings have changed over time- what buildings are still these from long ago? -Can you spot any numerical patterns?	
Family Learning **Penicuik family interview** If you have family members or friends of the family who have lived and worked in Penicuik they may know a lot about the history and land use. Set up an interview and ask them about; The different land uses in Penicuk The history of Penicuik and Penicuik traditions. The changes in Penicuik between now	**Learning Across the Curriculum** **Penicuik- Research** *I know about the environmental impact of land use in my local area* In days gone by Penicuik was famous for its paper production. Your task is to conduct some research into the history of Penicuik as a paper town. Explore the website to find out the answers to the following questions:	**Learning Across the Curriculum** **ICT- Internet Safety Week** *I know how to keep myself safe and secure online* The internet is an amazing tool that can be used for knowledge, games, fun and communication, but it can also present risks and challenges. Explore https://www.thinkuknow.co.uk/ and find at least five rules for staying

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and in the past. Record what they tell you and you can either share on your Penicuik research sheet or in our Google classroom. Mrs Mason has lived in Penicuik all her life and has very kindly shared a video with us to tell us about some of the changes she has seen- have a watch in our classroom. Thank you Mrs Mason! **Family game time** At the moment I sometimes feel like my eyes might go square from looking at screens! Although there are lots of great things online and on TV, it is nice to have a break and an important way of looking after ourselves. This week for family time, as part of our internet safety week, turn off all the screens for a little while and choose a game to play together as a family, this could be a board game or something active like charades.	During what dates did Penicuik paper mill run? What features of the location made it well suited to a paper mill? What did the paper mill produce? What two factors affected the environment? http://www.penicuikpapermaking.org/mills.html There is a research sheet in our Google classroom to record your answers. **Penicuik- Art** *I can use my observation skills and create an image including details I have observed* Choose a building in Penicuik- this could be Penicuik House, a church, or even your own house. Start by observing your building either in real life or in a picture. Observe which objects are above and which are below the horizon line. What basic shapes can you see within the building?	safe online. Make sure you include rules that cover how and when to share information, how to report concerns and how to behave online. There is also a video in our classroom to support in this. *I can demonstrate my understanding of responsible digital behaviour* Choose a way to present the information you gathered in the first task. This could be as a poster, a Power Point, in a leaflet or a video. You can share this in our classroom to help us all learn how to be safe online.

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	What special features and details are on the building? Draw your ground/ horizon line. Draw your basic building shape using perspective to help you get the lines going in the right directions. There is a video here to help you consider the perspective. Add the features and details you have observed. You can add background details and colour if you wish.	

Complete each activity on the grid – these can be completed in Green Jotter you were given.

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Reading Comprehension- Mild

Mary Somerville

Mary Somerville was born in Jedburgh on 26th December 1780. Educating girls was not thought of as very important in those days, so Mary only attended a local school for girls for one year as a child.

In her teenage years, Mary read as much as she could – which most of her family thought very unladylike! Mary's family wanted her to learn the skills thought necessary for a young lady, such as needlework and playing the piano. She was also given lessons in painting from an artist. The artist introduced her to a book which he felt was useful in helping Mary understand how to draw and place things in her pictures. This book was also about astronomy and other sciences.

In 1804, Mary married Samuel Greig and went to live in London. When her husband died three years later, Mary returned to Scotland with their two sons. Mary's friends encouraged her to continue studying mathematics and science.

In 1812, Mary married William Somerville. William was also very interested in science and he supported his wife's studies. Together, they studied geology and Mary also studied botany, French and Greek. Mary wrote and published her first science paper in 1826. In 1827, she was asked to translate a French science text. Her book was published in 1831 and was very successful. In her translation, Mary explained in detail the mathematics used in the text; most of which was new to mathematicians in Britain.

Mary's next book was published in 1834. In a later edition, published in 1842, Mary discussed the possibility of another unknown planet in the solar system. This led to the investigation and then discovery of the planet Neptune by other astronomers. Mary was now a well-known and well-respected authority on many subjects.

In 1838, the family moved to Italy because of William's ill health. Most of the rest of Mary's life was spent there, where she continued to write. One of her books, titled 'Physical Geography', was published in 1848. It was used in schools and universities until the beginning of the 1900s and was her most successful text.

Mary Somerville was a strong supporter of equality for women. In 1879, Somerville College at Oxford University was named after Mary because of her strong support for women's education. Mary Somerville died in Italy on 29th November 1872.

Questions

Read the text carefully and answer the questions by completing the sentences below.

1. Where and when was Mary Somerville born?
   Mary Somerville was born in _____
2. What skills did Mary's family want her to learn?
   Mary's family wanted her to learn _____
   _____
3. Why was Mary's book, published in 1842, important?
   This book was important because _____
   _____
   _____
4. Which of Mary's books was the most successful?
   Mary's book _____
   _____
   _____
5. In what way was Mary's support for equality and education for women recognised?
   Mary's support for equality and education for women was recognised _____
   _____
   _____

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Reading Comprehension- Spicy

Mary Somerville

Mary Somerville was born in Jedburgh on 26th December 1780. Although Mary had two brothers who were both given an education, educating girls was not thought of as very important in those days.

In her teenage years, Mary read as much as she could – which most of her family thought very unladylike! When Mary admitted to her uncle that she had been teaching herself Latin, he encouraged her to keep studying. Mary's family wanted her to learn the skills thought necessary for a young lady of that time, such as needlework and playing the piano. She was also given lessons in painting from an artist called Alexander Nasmyth. Nasmyth introduced Mary to a book which he felt was useful in understanding perspective in drawing. This book, called 'Euclid's Elements', was also about astronomy and other sciences. Mary studied the text with the help of her brother's tutor. She also became interested in studying algebra when she saw equations being used in a women's magazine. Mary quickly became fascinated by mathematics.

In 1804, at the age of 24, Mary married Samuel Greig and went to live in London. Samuel did not understand her need to learn. When her husband died three years later, Mary returned to Scotland with their two sons. Mary's friends encouraged her to continue studying mathematics and science. She read many mathematics and astronomy texts and wrote about what she had read.

In 1812, Mary married William Somerville. William was also very interested in science and he supported his wife's research and studies. Together, they studied geology and Mary also studied botany, French and Greek. Mary wrote and published her first science paper in 1826. In 1827, she was asked to translate a French science text. Her book was published in 1831 and was very successful. In her translation, Mary explained in detail the mathematics used in the text; most of which was new to mathematicians in Britain.

Mary's next book was published in 1834. In a later edition, published in 1842, Mary discussed the possibility of another unknown planet that affected the path of Uranus. This led to the investigation and then discovery of the planet Neptune by other astronomers. Mary was now a well-known and well-respected authority on many subjects.

In 1838, the family moved to Italy because of William's ill health. Most of the rest of Mary's life was spent there, where she continued to write. One of her books, titled 'Physical Geography', was published in 1848. It was used in schools and universities until the beginning of the 1900s and was her most successful text.

Mary Somerville was a strong supporter of equality for women. In 1879, Somerville College at Oxford University was named after Mary because of her strong support for women's education. Mary Somerville died in Italy on 29th November 1872.

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Reading Comprehension- Spicy

Questions

Read the text carefully and answer the questions in full sentences.

1. Where and when was Mary Somerville born?

2. What did most of Mary's family think of her love of reading?

3. Which two very different texts inspired Mary in her studies?

4. During her marriage to Samuel Greig, do you think Mary would have studied the subjects that interested her?

5. How do you think British mathematicians felt about Mary following the publication of her text in 1831?

6. Why was Mary's book, published in 1834, of such significance?

7. Why was much of Mary's later life spent in Italy?

8. How was Mary's support for equality and education for women recognised?

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Reading Comprehension- Hot

Mary Somerville

Mary Somerville was born in Jedburgh on 26th December 1780. Although Mary had two brothers who were both given an education, educating girls was not thought of as very important in those days. When Mary was ten years old, however, she did spend a year at a school for girls.

In her teenage years, Mary read as much as she could – which most of her family thought very unladylike! When Mary admitted to her uncle that she had been teaching herself Latin, he encouraged her to keep studying. Mary's family wanted her to learn the skills thought necessary for a young lady of that time, such as needlework and playing the piano. She was also given lessons in painting from an artist called Alexander Nasmyth, who introduced her to a book which he felt was useful in understanding perspective in drawing. This book, called 'Euclid's Elements', was also about astronomy and other sciences. Mary studied the text with the help of her brother's tutor. She also became interested in studying algebra when she saw equations being used in a women's magazine. Mary quickly became fascinated by mathematics.

In 1804, at the age of 24, Mary married Samuel Greig. She and her husband went to live in London. Mary soon found that Samuel did not understand her need to learn. When her husband died three years later, Mary returned to Scotland with their two sons. Mary's friends encouraged her to continue studying mathematics and science. She read many mathematics and astronomy texts and wrote about what she had read.

In 1812, Mary married William Somerville. William was also very interested in science and he supported his wife's research and studies. Together they studied geology and Mary also studied botany, French and Greek. Mary wrote and published her first science paper in 1826. In 1827, she was asked on behalf of the Society for the Diffusion of Useful Knowledge to translate a French science text. Her book The Mechanism of the Heavens was published in 1831 and was

very successful. In her translation, Mary explained in detail the mathematics used in the text; most of which was new to mathematicians in Britain.

Mary's next book, 'The Connection of the Physical Sciences', was published in 1834. In a later edition, published in 1842, Mary discussed the possibility of another unknown planet that affected the path of Uranus. This led to the investigation and then discovery of the planet Neptune by other astronomers. Mary was now a well-known and well-respected authority on many subjects. She was elected to the Royal Astronomical Society in 1835 and was given honorary membership of other scientific organisations in Geneva and Ireland.

In 1838, the family moved to Italy because of William's ill health. Most of the rest of Mary's life was spent there, where she continued to write. One of her books, titled 'Physical Geography', was published in 1848. It was used in schools and universities until the beginning of the 1900s and was her most successful text. This book also saw her elected to join geographical societies in America and Italy. In 1870, she received the Victoria Gold Medal of the Royal Geographical Society.

Mary Somerville was a strong supporter of equality for women. In 1879, Somerville College at Oxford University was named after Mary because of her strong support for women's education. Mary Somerville died in Italy on 29th November 1872.

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Reading Comprehension- Hot

Questions

Read the text carefully and answer the questions in full sentences.

1. Why do you think educating girls was not thought of as being very important when Mary was a child?

   _____

2. Why do you think some of the skills thought necessary for a young lady of that time were needlework, playing the piano and painting?

   _____
   _____
   _____

3. Why did Alexander Nasmyth feel that Mary should read the text Euclid's Elements?

   _____
   _____

4. Why might Samuel, Mary's first husband, not understand her need to study?

   _____
   _____
   _____

5. Why do you think Mary's friends encouraged her to continue studying mathematics and science after her return to Scotland?

   _____
   _____

6. Why do you think William Somerville's opinions were so different from Samuel Greig's?

   _____
   _____

7. Why do you think Mary grew to be a well-known and well respected authority on many subjects?

   _____

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Book Review

Title:	**Who would you recommend the book to and why?**
Author:	
Fiction or Non- fiction:	**Book rating: Delete as appropriate** ★★★★★
Summary of the book: (Remember a summary includes the key facts but not every detail.)	**What three things did you learn from the book? Or What three things did you learn about the main character?**
	Illustration- draw or insert

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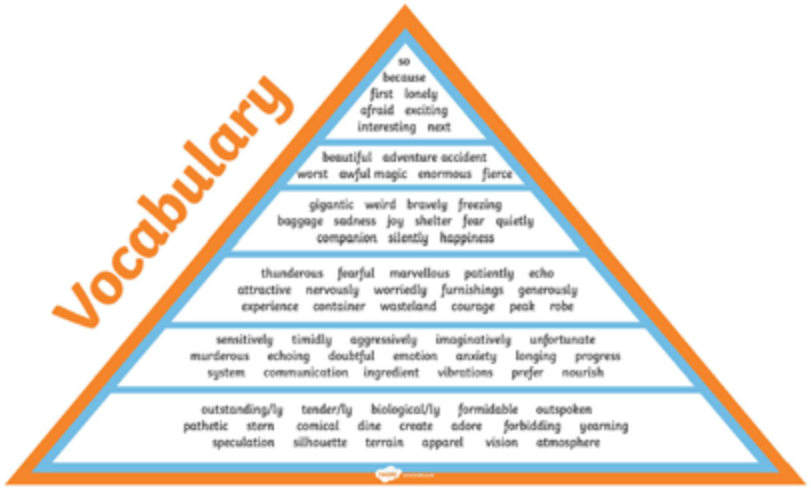
VCOP

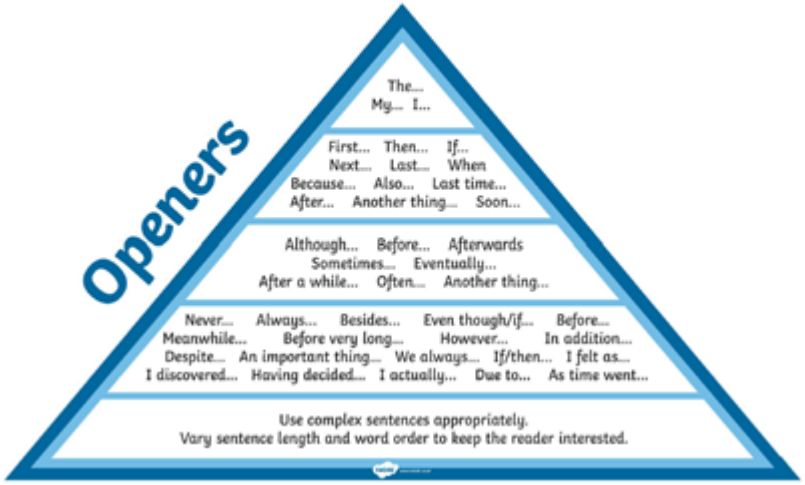
I can use a range of techniques to enhance my writing

Remember VCOP (Vocabulary, Conjunctions/ Connectives, Openers and Punctuation) can help us to enhance our writing.



Choose five words from the pyramid above to write in a sentence, remember to go as far down the pyramid as you can to challenge yourself.

1.
2.
3.
4.
5.



Although; Create four different sentences that all start with the word 'Although'. I have started with an example to help you.

Although it was late, he was not tired.
1.
2.
3.
4.

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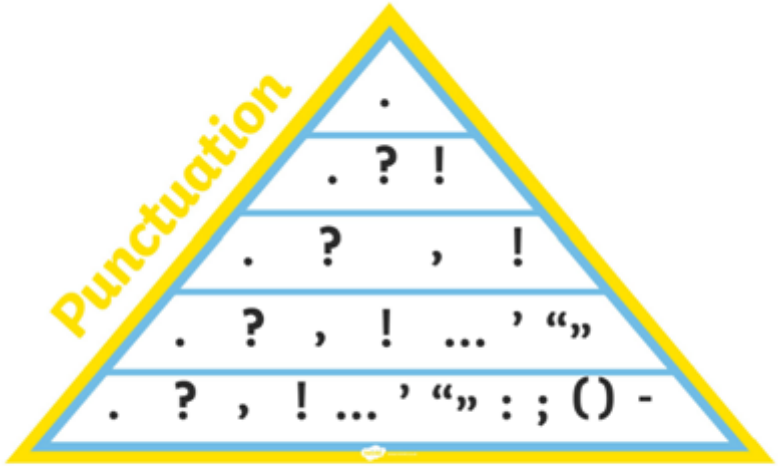
Choose five conjunctions and write a sentence using each one- again try to move as far down the pyramid as you can, or use a conjunction of your own!

1.
2.
3.
4.
5.



Write four exciting sentences that need an exclamation mark (!) at the end.

1.
2.
3.
4.

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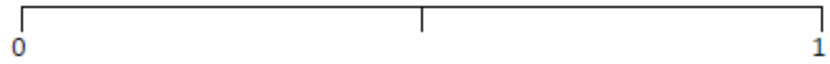
Fractions/ Decimals/ Percentages- Mild

Fill in the missing fractions on these fraction number lines.

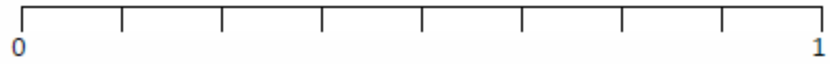
A)

B)

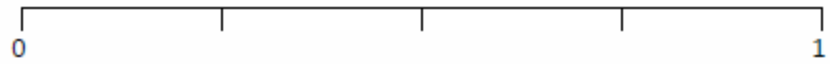


B)

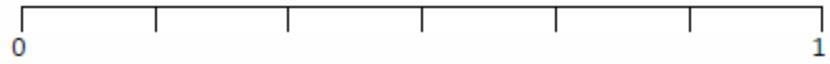
C)



D)

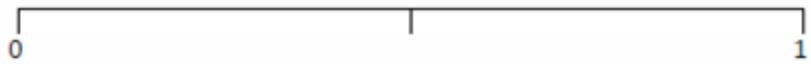


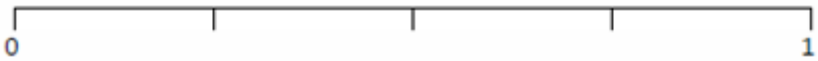
E)

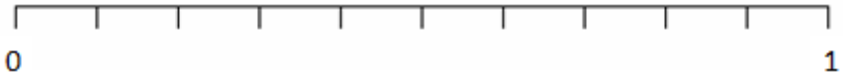


Fractions/ Decimals/ Percentages- Spicy

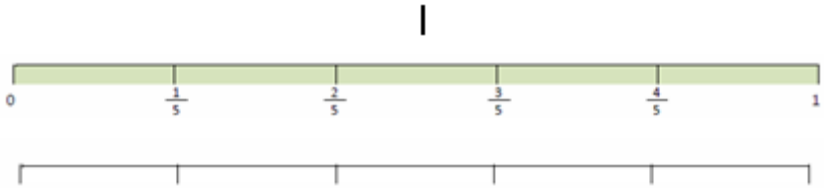
Complete the number lines by adding decimals in the empty boxes.







Challenge- Have a go at this one- if I cut one whole into 5 parts, each part would be equal to 2 tenths- as decimal we write this as 0.2- I have filled the first one in for you.



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Fractions/ Decimals/ Percentages- Hot

Find these percentages of numbers and amounts.

A) 50% and 100%

1)	50% of 14 =	2)	50% of 60 =	3)	100% of 12 =
4)	50% of 24 =	5)	100% of 25 =	6)	50% of 18 =
7)	100% of 17 =	8)	50% of 40 =	9)	50% of 80 =
10)	50% of 50 =	11)	100% of 64 =	12)	50% of 38 =

B) 1% and 10%

1)	10% of 70 =	2)	10% of 30 =	3)	1% of 400 =
4)	10% of 30 =	5)	1% of 500 =	6)	10% of 120 =
7)	10% of 400 =	8)	1% of 1200 =	9)	1% of 3800 =
10)	10% of 500 =	11)	10% of 180 =	12)	1% of 1800 =

C) 1%, 10%, 50% and 100%

1)	50% of 40 =	2)	1% of 700 =	3)	10% of 140 =
4)	100% of 80 =	5)	10% of 320 =	6)	50% of 160 =
7)	1% of 900 =	8)	50% of 72 =	9)	10% of 900 =
10)	10% of 320 =	11)	1% of 5300 =	12)	100% of 120 =
13)	50% of 240 =	14)	1% of 2700 =	15)	10% of 800 =

Fractions/ Decimals/ Percentages- Sizzling

Find these percentages of numbers.

A) Multiples of 1%

1)	1% of 500 =	2)	3% of 500 =	3)	6% of 500 =
4)	1% of 130 =	5)	2% of 130 =	6)	5% of 130 =
7)	1% of 200 =	8)	4% of 200 =	9)	9% of 200 =
10)	1% of 250 =	11)	3% of 250 =	12)	6% of 250 =

B) Multiples of 10%

1)	10% of 80 =	2)	30% of 80 =	3)	50% of 80 =
4)	10% of 120 =	5)	20% of 120 =	6)	60% of 120 =
7)	10% of 70 =	8)	30% of 70 =	9)	90% of 70 =
10)	10% of 220 =	11)	30% of 220 =	12)	40% of 220 =

C) Mixed

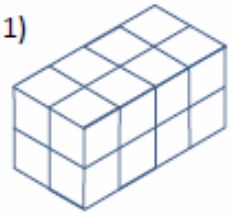
1)	10% of 40 =	2)	3% of 400 =	3)	20% of 70 =
4)	7% of 20 =	5)	60% of 50 =	6)	5% of 200 =
7)	1% of 900 =	8)	30% of 200 =	9)	8% of 30 =
10)	20% of 130 =	11)	6% of 400 =	12)	8% of 600 =
13)	40% of 70 =	14)	90% of 50 =	15)	7% of 1100 =

P6 Cuiken Primary Home Learning Grid

Volume- Mild

Write down the volume of each of these shapes by working out the number of cubes.

1)



Volume: _____ cubes

2)

Volume: _____ cubes

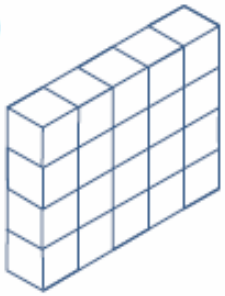
3)

Volume: _____ cubes

4)

Volume: _____ cubes

5)

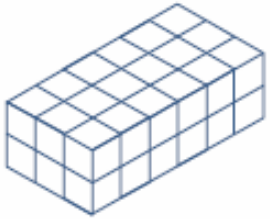


Volume: _____ cubes

6)

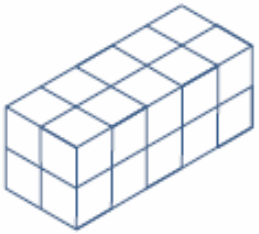
Volume: _____ cubes

7)



Volume: _____ cubes

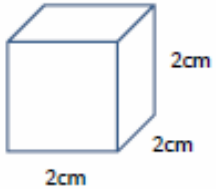
8)



Volume: _____ cubes

Volume- Spicy

Find the volume of these rectangular prisms. They are not to scale!



Volume = _____

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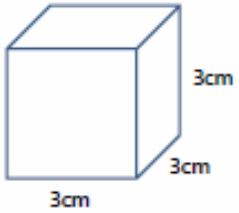

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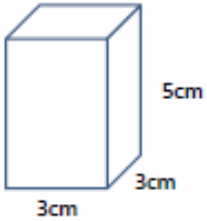

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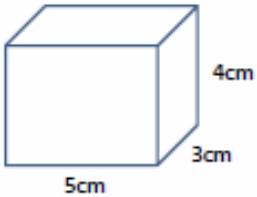

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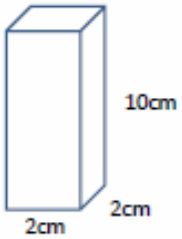

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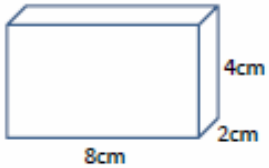

Volume = _____

P6 Cuiken Primary Home Learning Grid

Volume- Hot

The answer to each riddle is one of the shapes below.

Find the correct answer to each, and success is within your reach!

1)
- I am a rectangular prism.
- I am fewer than 3 cubes high.
- I am made of more than 5 cubes.
- My volume is fewer than 8 cubes.
- Who am I?

Answer ___

2)
- I am more than 1 cube high.
- I am not a cuboid.
- My volume is less than 8 cubes.
- My length and width are not the same.
- Who am I?

Answer ___