Edgeworth Heights Public School

Respect, Responsibility, Strive - Everyone, Everywhere, Every Time

Stage 2

Numeracy

Learning Pack

Term 4

Weeks 2 & 3.

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The expectation is that you complete the entire grid. Work across the grid from left to right, completing activities in order from number 1 to 20.

This week we will be learning to:

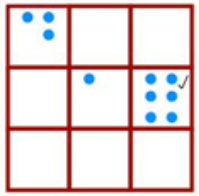
- Represent mathematical situations in a variety of ways using mathematical language.
- Use appropriate steps to solve word problems.
- Use appropriate steps to understand multiplication and division, addition and subtraction problems.
- Investigate measurement, focusing on volume, capacity and mass.
- Understand decimals when solving problems about money and represent and identify common fractions.

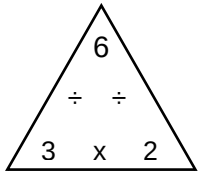
Each day you should be attempting 2 activities.

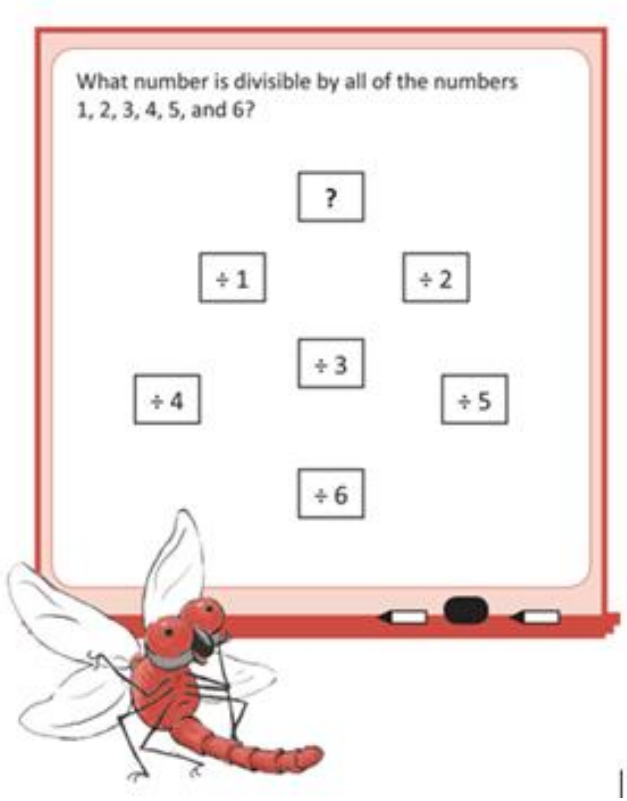
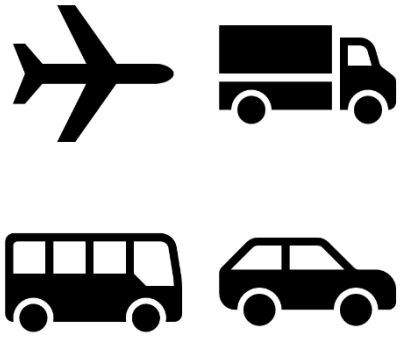
Activities with a tick (must do) are compulsory tasks. These are to be submitted for feedback from teachers. Upload your ticked task on Seesaw: if you are having difficulty with this, speak to your teacher or contact the school. Your also need to return all work to school when we resume face-to-face learning.

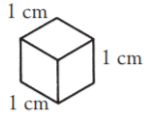
Activities

Number talks **Whole number**	**Number facts** **Addition & Subtraction** **Multiplication & Division**	**Fractions** **Decimals**	**Volume & Capacity** **Mass**
1. Number Talk	***2. Multiplication & Division***	***3. Decimals***	***4. Capacity***
How many dots can you see? Find four different ways to solve this problem? Write them in your workbook. **MUST DO ACTIVITY** ✓ 	**(Worksheet 1)** Complete the written word problems on worksheet 1. Remember when we are trying to work out written word problems to look for key words to help you answer such as: • How many • Total • Sum of **Challenge:** Travis has designed a computer problem which multiplies any number put in, by a number chosen by the computer. He inputs four numbers, and the answers which come out are 49, 126, 98 and 154. Which number might his program be multiplying by?	**(Worksheet 2)** When we add together sums with a decimal, it is important to make sure that each number stays in the correct column to help us find the answer. For example: ↓ ↓ ↓ ↓ 2 3 . 2 + 1 0 . 4 3 3 . 6 Complete the decimal additions on worksheet 2.	**(Worksheet 3)** Capacity refers to how much a container holds. One litre is equal to 1000ml. You can make one litre up by having different containers. Answer the questions on worksheet 3. **Challenge 1.** Find measuring jugs at your house. Fill them to total capacity. Record their measurement. Empty some out and record how much you emptied out and what the remaining measurement was. **Challenge 2.** A carton of milk is either 1L, 2L or 3L in measurement. If you drank a cup of milk (250ml) a day, how many cups would you be able to drink from each carton?

Number Talks Whole Number	Addition & Subtraction Multiplication & Division	Fractions Decimals	Volume & Capacity Mass
5. Number Talk **(Worksheet 4)** **Dotty Six** Watch this video to see the game being played. https://nrich.maths.org/7337 *Can you work out the rules?* You need a partner, a 1-6 dice and the grid on worksheet 4. Take turns to throw the dice and draw that number of dots in one of the boxes on the grid. Put ***all of your dots*** in one of the boxes. You can't split them up and you can't have more than six dots in a box. When a box is full, you could put a tick in the corner like this:  Keep going until there are three ticks in a row or column or diagonal. The winner is the person who puts the last tick. **Challenge:** Now, can you change the game to make your own version.	***6. Addition.*** **(Worksheet 5)** Mr & Mrs Vroom have gone to the garage to buy a new car each to get to work. There are multiple cars at the garage that they can buy. Calculate the costs on worksheet 5 of the different combinations they could have when they buy two cars.  **Challenge:** Work out the cost if they were to buy the three most expensive cars. What would be the cost if the bought the three cheapest cars?	***7. Decimals*** **MUST DO ACTIVITY ✓** Miss Shaw wants to have a picnic in the park with her 5 friends. She told her friends that she will buy all the food and they can give her money for it after she has bought it. This is her list. • Bread rolls = $5.40 • BBQ chicken = $9.95 • Salad bag = $5.00 • Potato chips = $2.75 • Lemonade = $ 2.75 • Plastic cups = $3.75 • Serviettes = $1.90 How much money will she need to buy the food? When you add, make sure you have the decimal points underneath each other. Show your working out in an algorithm in your workbooks and post your work onto see saw. **Challenge:** Can you work out what each person will have to pay Miss Shaw. ❖ Don't forget Miss Shaw has to pay some money also, so you have to divide the total amount by 6.	***8. Mass*** **(Worksheet 6)** Mass is when we look at and measure how heavy something is. We use grams, kilograms and tonnes as the unit of measurement. Complete worksheet 6 where you match an item to a scale. **Challenge:** Using your kitchen scales at home or hefting (using your hands as scales) find 5 objects and weigh them and order them lightest to heaviest.

Number Talk Whole Number	Addition & Subtraction Multiplication & Division	Fractions Decimals	Volume & Capacity Mass
9. Number Talk **Go large!** Using *addition and subtraction* make the **largest answer** you can using the three digits **2, 3, 4** any way you like, but you can only use the numbers once. Example: 24 + 3 = 27 **Challenge:** This time pick three two- digit numbers and try again!	***10. Multiplication & Division*** **(Worksheet 7)** Multiplication and division are **inverse operations**, which means they're opposite operations. The inverse of multiplication is division. For example here is 3 × 2 = 6. If you divide 6 by the number 2, you will get the answer 3. 3x2 = 6 (inverse operation is) 6÷2=3 Complete the multiplication triangles on worksheet 7 to find the inverse operation. Example  **Challenge:** Create 5 of your own triangles.	**11. Fractions** Making fractions with bread and sprinkles. You will need one piece of bread, butter, sprinkles (or whatever you have at home for the topping) Instructions: 1. Take one piece of bread and spread it with butter. 2. Add sprinkles on the top. 3. Take a butter knife and cut your bread into ½. 4. Then cut it into ¼. 5. Lastly cut your bread into 1/8. Take a photo of your creation and load it up to see saw.	***12. Mass*** **(Worksheet 8)** We can use scales to measure how heavy something is. There are many different types of scales.  Draw the marker on the scales to represent the weight of the objects in worksheet 8. **Challenge:** Make a list of all the places you can think of where they might use scales to measure the mass of something.

Number Talk Whole Number	Addition & Subtraction Multiplication & Division	Fractions Decimals	Volume & Capacity Mass
13. Division Number Talk **What number is it?** Can you solve this Number Talk? Don't forget to show your working out in your workbook.  	***14. Subtraction*** **(Worksheet 9)** Each of the vehicles on worksheet 9 are on a journey somewhere. Each have completed part of their journey, but still have a long way to travel. Use column subtraction to calculate how much further each one still must travel before they arrive at their destination. 	***15. Fractions*** **(Worksheet 10)** Fractions can be used to help divide things into even parts, for example a pizza.  Complete worksheet 10 where you compare fractions. **Challenge:** Can you draw your own pizza wheel and colour the fraction of 6/8??	***16. Volume*** **(Worksheet 11)** ***Volume*** *is a measure of the space occupied or enclosed by a solid shape.* Calculate the volume for each shape on worksheet 11. After calculating the volume, answer the reflection questions on the next page. **Challenge:** Draw or build your own 3D shapes made from cubes. Calculate their volume.

Number Talk Whole Number	Addition & Subtraction Multiplication & Division	Fractions Decimals	Volume & Capacity Mass
17. Whole Number **(Worksheet 12)** Odd numbers are numbers that end in 1, 3, 5, 7 or 9. Where even numbers are numbers that end in 0, 2, 4, 6, 8. For example, 4006 is an even number because the number ends with 6, which is an even number. 3877 is an odd number because the number ends with a 7, which is an odd number. Complete worksheet 12 'Odd and Even numbers' from your resource pack.	***18. Subtraction*** **(Worksheet 13)** **MUST DO ACTIVITY** ✓ There was a huge sale on at the department store. A lot of items were on sale. One customer bought eight items.  On worksheet 13 calculate the money the customer saved on each item using vertical subtraction. Use the blank space or complete in your workbooks. **Challenge 1:** Work out how much the customer spent all together on her items. **Challenge 2:** Calculate what the original price would have been altogether for all those items.	***19. Fractions.*** **(Worksheet 14)** Fractions are equal size parts of a whole. When we work with fractions, each part must be equal. For example, If I have 9 chocolates and want to fraction them into thirds. I must share the 9 into 3 equal parts. Where each part would then have 3 in each.  Complete worksheet 14. Remember to write how many are in each part at the bottom of each activity.	***20. Volume*** **(Worksheet 15)** **MUST DO ACTIVITY** ✓ This cube is 1cm long, 1cm high and 1cm wide. We say it has a volume of 1 cubic centimeter (1 cm3).  If we put 4 of these shapes together the new shape has a volume of 4 cm3  Discover the volumes of each shape on worksheet 15. **Challenge:** Work out the volume if I had 10,16 and 30 cubes.

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Numeracy Resources

Worksheet 1.

1. How many tables are needed to seat 237 people when the tables seat 11 people each?

2. Samuel has 241 marbles at a party. He puts 8 marbles into each gift bag. How many gift bags does he fill?

3. Video games cost $5 each. How many can you buy with $156?

4. The teacher gives out 423 lollies. The children are given 16 each. How many children get 16 lollies?

Worksheet 2.

Decimals Addition

Work out the calculations.

a)	$3.40 + $2.20	b)	$4.20 + $3.60	c)	$5.30 + $2.60	d)	$3.30 + $6.40
e)	$4.50 + $3.40	f)	$3.70 + $8.20	g)	$5.50 + $6.40	h)	$4.50 + $7.60
i)	$7.70 + $6.30	j)	$9.60 + $3.80	k)	$13.72 + $ 8.60	l)	$14.30 + $ 8.80

1) $3.20 + $2.30 = _____

2) $4.10 + $3.50 = _____

3) $5.40 + $3.50 = _____

4) $7.20 + $3.60 = _____

5) $8.70 + $4.40 = _____

6) $7.40 + $7.50 = _____

7) $6.90 + $5.40 = _____

8) $9.40 + $7.90= _____

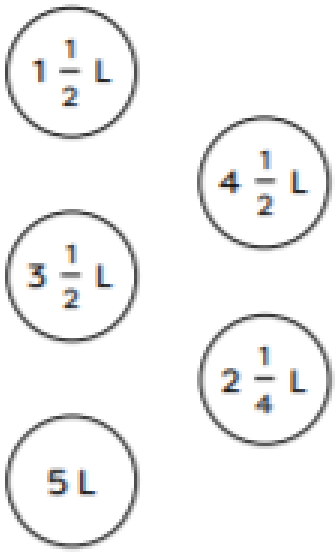
1. I spent $15.20 in one shop, $5.80 in another and $3.25 in the last shop. How much money did I spend altogether?

_____

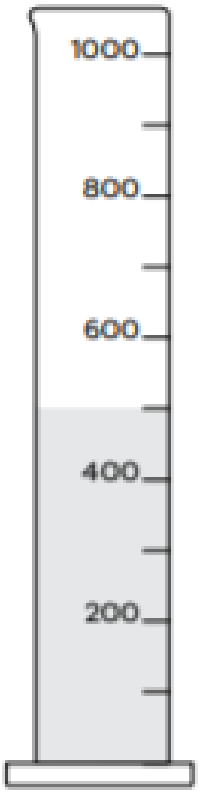
Worksheet 3.

Measuring Capacity – Reading Scales

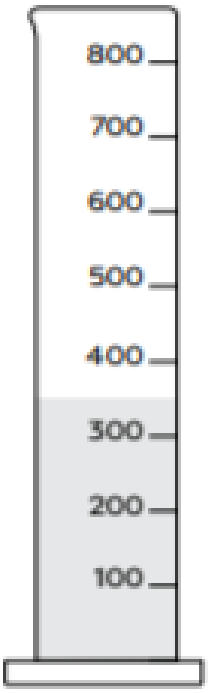
1. Draw lines to show the capacity on the jug.



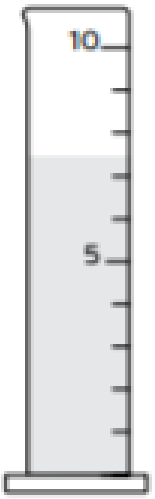
2. Write the amount of liquid in each container.



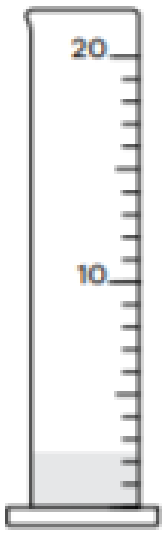
_____mL



_____mL



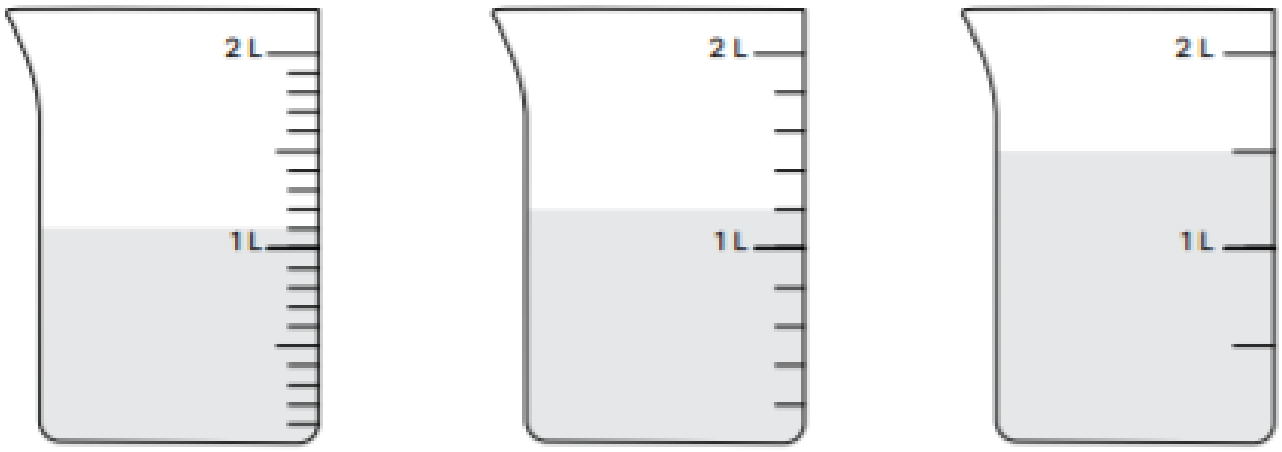
_____mL



_____mL

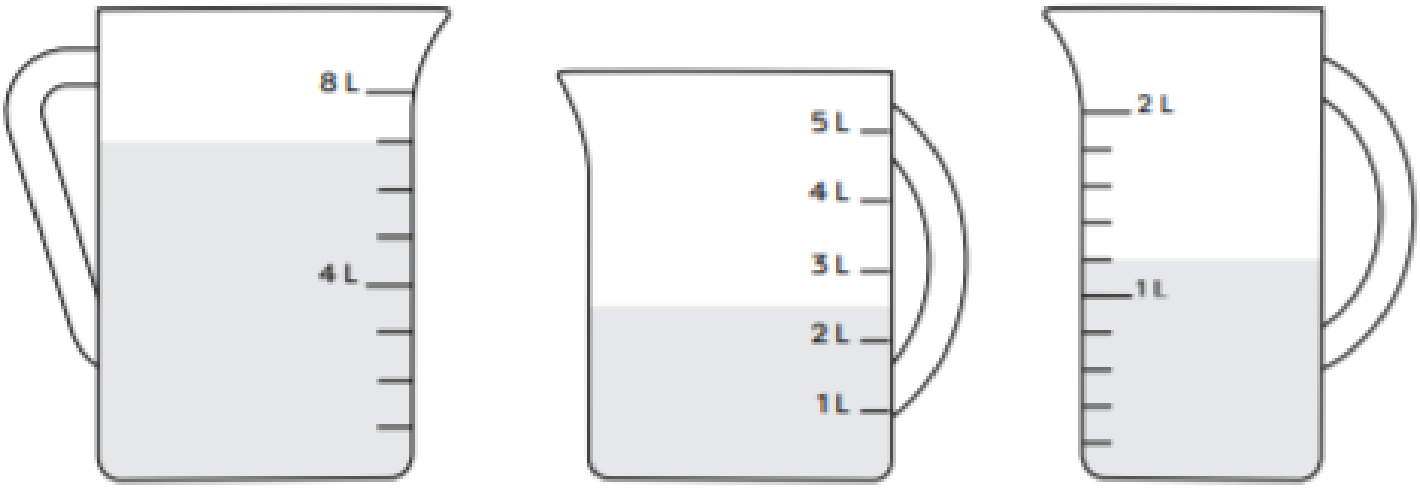
Measuring Capacity – Reading Scales

3. Each of these jugs was filled to the 2 L mark. Some of the liquid has been tipped out. Beneath each jug, write the amount of liquid that has been tipped out.



_____mL _____mL _____mL

4. How much more liquid needs to be added to these containers to reach the labelled full capacity?



_____ _____ _____

Worksheet 4.

Worksheet 5.

Cars Column Addition

Mr and Mrs Vroom have gone to the garage to buy a new car each to get to work in. Below are some of the cars they could buy. Calculate the costs of different combinations of cars.

Red	Blue	Grey	Silver	White	Black
$3625	$2814	$4132	$5892	$3145	$3532

1 Silver & White

$5892 + $3145 = $

2 Black & Silver

$3532 + $5892 = $

3 Black & Grey

$3532 + $4132 = $

4 Grey & White

$4132 + $3145 = $

5 White & Blue

$3145 + $2814 = $

6 Grey & Blue

$4132 + $2814 = $

7 Silver & Red

$5892 + $3625 = $

8 Black & Blue

$3532 + $2814 = $

9 Blue & Silver

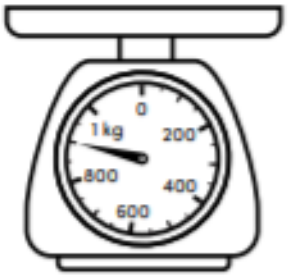
$2814 + $5892 = $

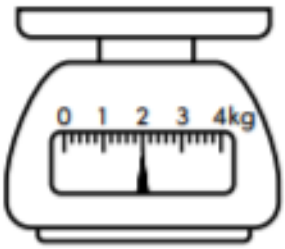
Mr and Mrs Vroom have a budget of $7000.
Which combinations of cars could they afford to buy?

Worksheet 6.

Reading Scales – Measuring Mass Match-Up

Draw a line from the scales to the object with the matching mass.





$1\frac{1}{2}$ kg

7 kg

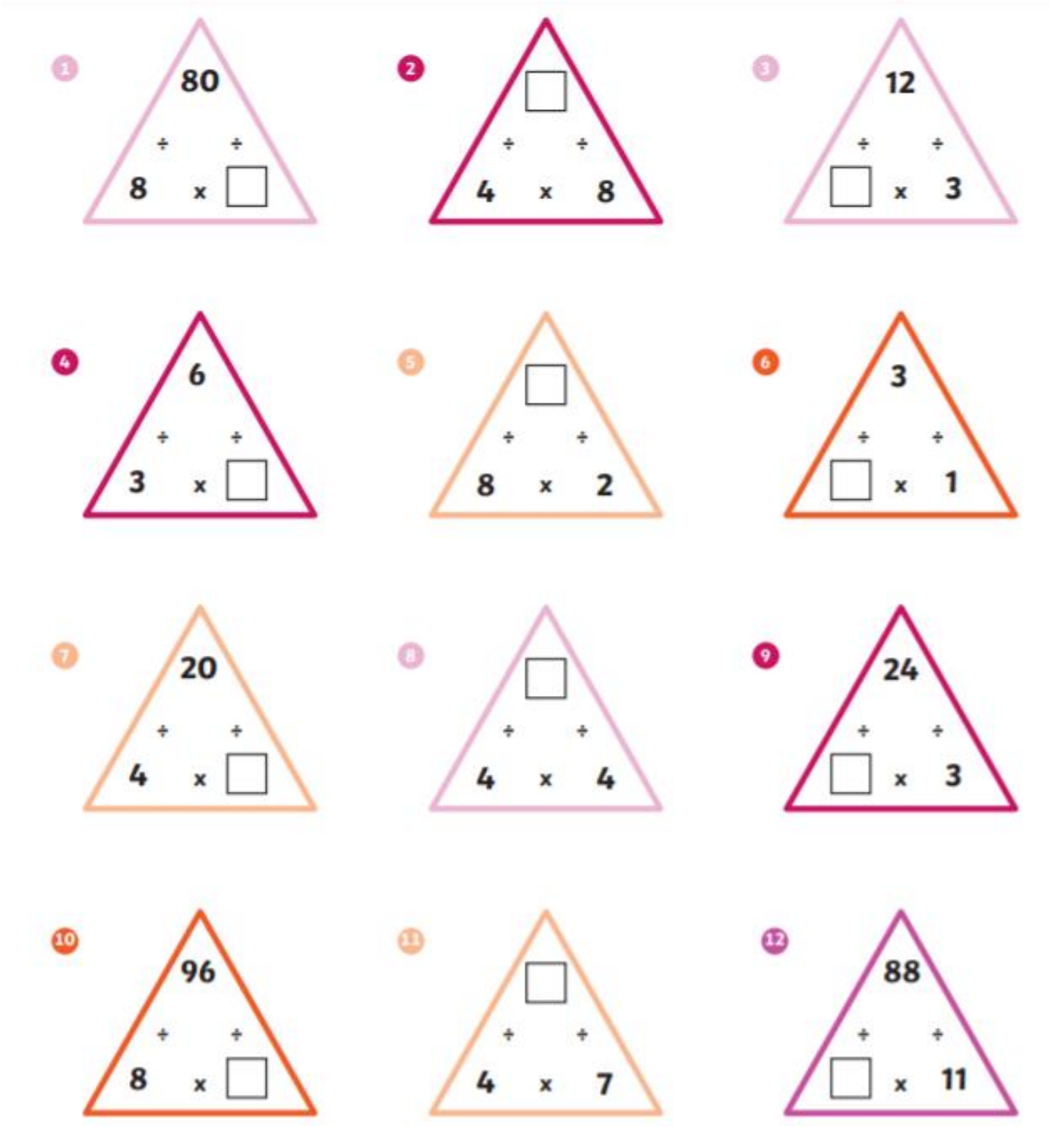
900 g

3 kg

2 kg

Worksheet 7.

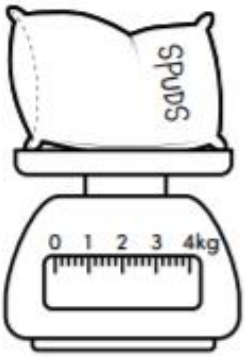
Multiplication & Division Triangles.



Worksheet 8.

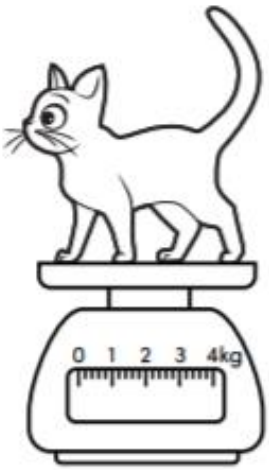
Reading Scales – Measuring Mass

Draw a line to show where the needle would be pointing on each of these scales.

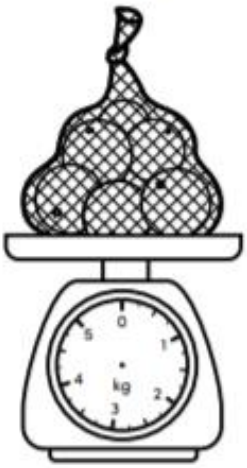


2 kg

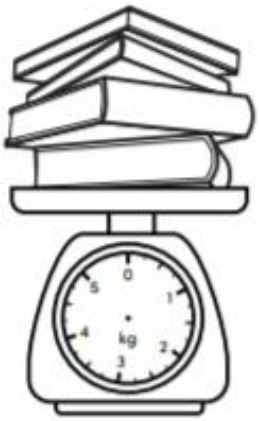
3 kg



4 kg

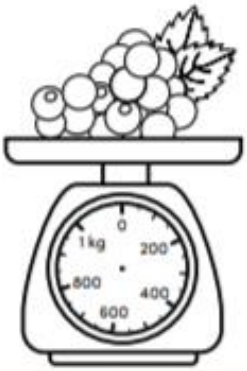


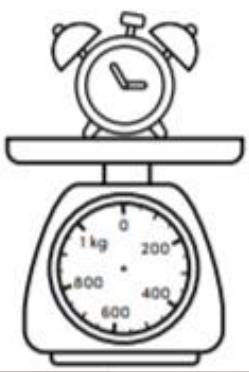
$1\frac{1}{2}$ kg

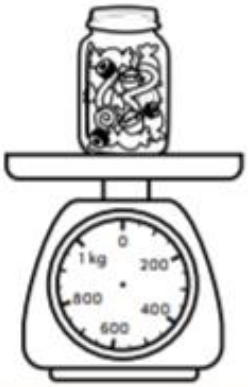


3 kg

$2\frac{1}{2}$ kg







Worksheet 9.

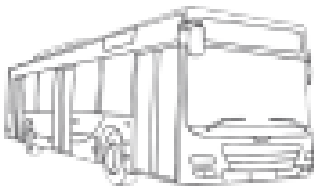
Transport Subtraction

Each of the vehicles below are on a journey. Each have completed part of the journey, but still have a long way to travel. Use column subtraction to calculate how much further each one has to travel to arrive at their destination.

Aeroplane
Journey: 3470 miles
Completed so far: 2140 miles

	3	4	7	0
-	2	1	4	0

Remaining distance: _____



Bus
Journey: 7845 miles
Completed so far: 3623 miles

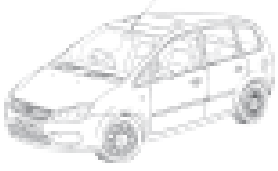
	7	8	4	5
-	3	6	2	3

Remaining distance: _____

Truck
Journey: 7403 miles
Completed so far: 4189 miles

	7	4	0	3
-	4	1	8	9

Remaining distance: _____



Car
Journey: 6074 miles
Completed so far: 4638 miles

	6	0	7	4
-	4	6	3	8

Remaining distance: _____

Worksheet 10.

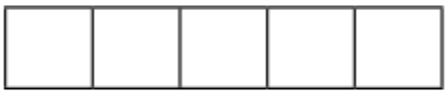
Comparing Fractions

I can compare and order fractions.

Order these fractions from smallest to largest: $\frac{3}{4}$ $\frac{1}{4}$ $\frac{2}{4}$

Order these fractions from largest to smallest: $\frac{4}{6}$ $\frac{6}{6}$ $\frac{3}{6}$ $\frac{1}{6}$ $\frac{5}{6}$

Colour the boxes according to the fraction. Which fraction is greater?

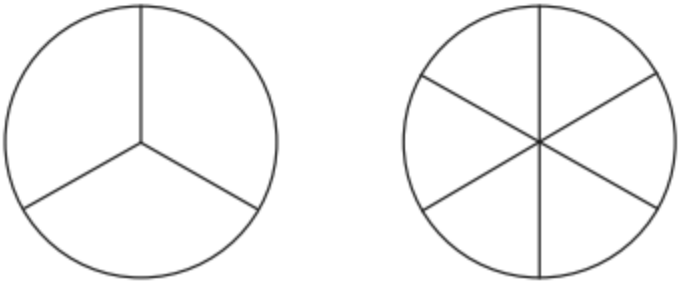
$\frac{2}{5}$ 

$\frac{4}{5}$ 

☐ is the greater fraction.

Colour in the 2 fractions below:

$\frac{2}{3}$ $\frac{5}{6}$



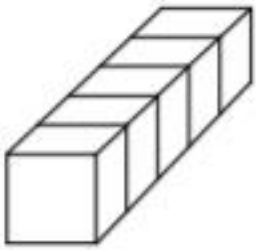
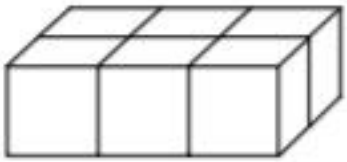
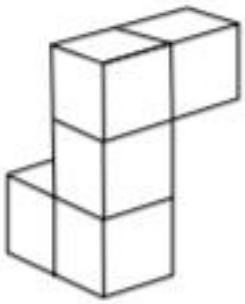
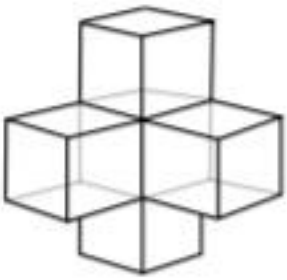
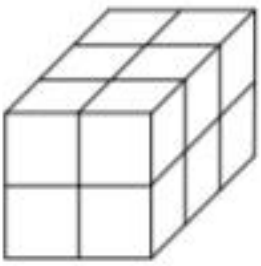
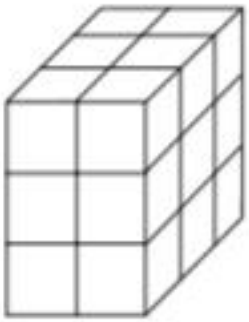
☐ is the greater fraction.

Worksheet 11.

Measuring Volume

Volume is a measure of the space occupied or enclosed by a solid shape.

Look carefully at the shapes below. For each one, calculate its volume by counting how many cubes are used to construct it. Write the answer under the picture.

1.  Number of cubes:	2.  Number of cubes:
3.  Number of cubes:	4.  Number of cubes:
5.  Number of cubes:	6.  Number of cubes:

Reflection

Use your answers to complete the following questions.

1. Which shape has the **largest** volume?

2. Which shapes have the **same** volume?

3. Which shape's volume was the **easiest** to measure and why?

4. Which shape's volume was the **hardest** to measure and why?

Worksheet 12.

Odd and Even Number Rules Activity

I can explain what odd and even numbers are.

Here is a collection of numbers. Decide whether they are odd or even and write them under the correct heading in the table.

4	9	7	12	33	54	16
28	15	41	36	20	11	21

Odd	Even

Is there a rule that you can think of for making it easier to identify if a larger number is odd or even? Explain your rule.

Worksheet 13.

Super Sale

At the department store, there was a special one-day sale on all items. Below you will find the shopping for one customer with the original price and the sale price of each item they bought. Calculate the money saved on each item by using **column subtraction.** Use the space below the table to complete your calculations, and then write your answers on the table.

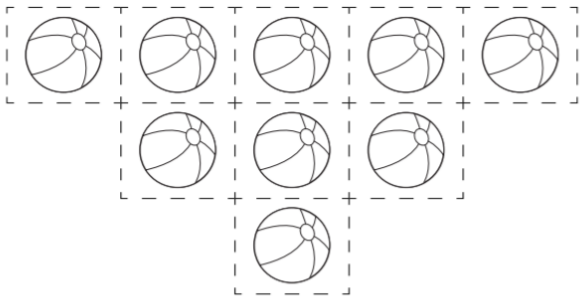
Item	Original Price	Sale Price	Money Saved
A television	$1467	$623	
A kettle	$24.36	$8.24	
A mirror	$89.43	$11.51	
A new coat	$54.72	$22.16	
Shoes	$72.38	$24.25	
A jumper	$36.00	$12.48	
A dress	$43.56	$12.82	
A new coat	$58.25	$32.43	

Show your working out here:

Worksheet 14.

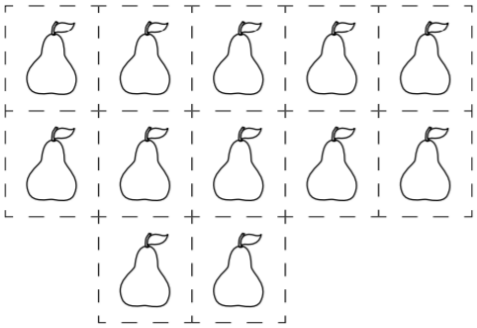
Fractions of Sets

Show each item shared equally amongst the boxes bellow it.



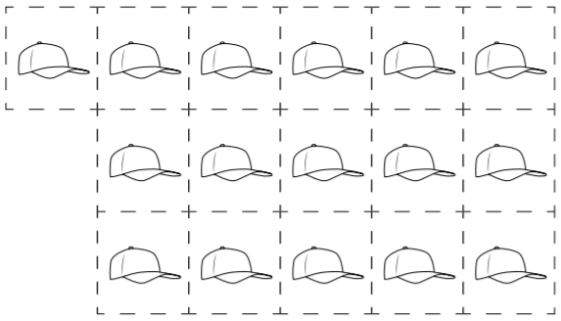
$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$

$\frac{1}{3}$ of 9 balls is _____.



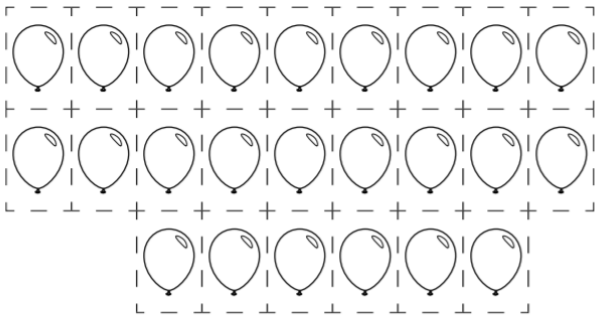
$\frac{1}{4}$	$\frac{1}{4}$
$\frac{1}{4}$	$\frac{1}{4}$

$\frac{1}{4}$ of 12 pears is _____.



$\frac{1}{2}$	$\frac{1}{2}$

$\frac{1}{2}$ of 16 caps is _____.



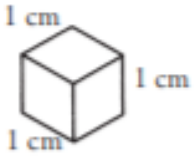
$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$

$\frac{1}{3}$ of 24 balloons is _____.

Worksheet 15.

Volumes of cubes

This cube is 1 cm long, 1 cm high, and 1 cm wide. We say it has a volume of 1 cubic centimeter (1 cm^3).

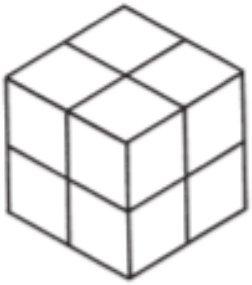


If we put 4 of these cubes together the new shape has a volume of 4 cm^3.

These shapes are made of 1 cm^3 cubes. What are their volumes?

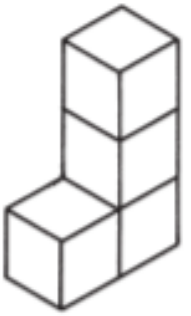
_____ cm^3

_____ cm^3

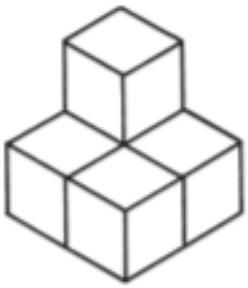


_____ cm^3

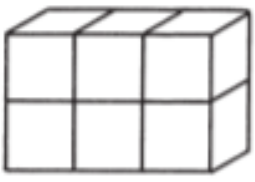
_____ cm^3



_____ cm^3

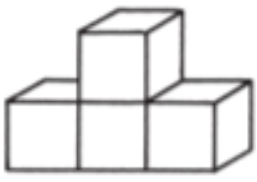


_____ cm^3



_____ cm^3

_____ cm^3



_____ cm^3