$$
\begin{gathered}
\text { RSI Maths } \\
\text { Summer term } 2 \\
\text { Weeks I \& } 2
\end{gathered}
$$



## Guidance for Parents

When young children are learning about maths, it is important that they do their calculations physically using equipment and when they are comfortable they can move on to using models and images to help them in their mathematical thinking before writing number sentences.

Here are some models and images to support with multiplication and division, the children will be looking at this term.

## Models and images for understanding multiplication and division



To do the maths activities at home, everyday materials can be used to provide the equipment required:

- ruler
- buttons
- straws
- coat hanger
- stones/pebbles
- pegs
- kitchen scales
- plastic/paper plates
- egg boxes
- socks and gloves
- plastic/paper bowls
- coins

The 'Give me 5' activities will cover the mathematics your children should have been taught in school during the Autumn and Spring terms. The daily 'Give me 5' questions are to recall what they can remember and apply.

| Easier | Harder |
| :---: | :---: |
| Week 1 | Week 1 |
| 1. Fill in the missing numbers | 1. Fill in the missing numbers |
| $6,8, \ldots, \ldots, 14,16, \ldots, 20, \ldots, 24, \ldots$ | $36, \ldots, \ldots, 27,24, \ldots, 18, \ldots \ldots \ldots$ |

2. How many to I need to subtract from 16 to make 9?
3. What is one more and one less than the following numbers:
$\qquad$
$\qquad$
$\qquad$ 34 $\qquad$
4. How many coins do I need to make 20p?

5. If I have a 10 cm baby shoe lace, but I only need a 7 cm shoe lace. How much do I need to cut off?
6. How many do I need to subtract from 27 to make 13?
7. What is 10 more and 10 less than the following numbers:
$\qquad$
$\qquad$ 53 $\qquad$
__ 89 $\qquad$
8. How many coins do I need to make 35 p ?
9. How many 3 cm strips of wool would I be able to cut if I had 20 cm of wool? What amount of wool would be left over?
10. Match the numeral to the words:

| 12 | Twenty-one |
| :--- | ---: |
| 21 | Seventy-one |
| 17 | Seventeen |
| 71 | Twelve |

1. Write the following numbers in words

18 $\qquad$

81 $\qquad$

2. What is the most popular pet?

What is the least popular pet?
3. How many children own a cat?
4. How many more children own a rabbit than a hamster?

Which pet is owned by 5 children?
5. What is the difference between the number of children who own a dog and the number of children who own a cat?

The number of cars sold by the Nissan Company from January to June

2. How many cars were sold in June?

How many cars were sold in February?
3. What is the difference between cars sold in `May and cars sold in January?

What is the difference between cars sold in 'April and cars sold in February?
4. What is the total sum of cars sold for the first 3 months of the year?
5. In which 2 months were car sales the same?
Statistics - Our Favourite Fruit

Statistics - Spider Pictogram

|  | In the shed |
| :---: | :---: |
|  | In the garden |
|  | In the house |
|  | In the garage |
|  | In the bin |


|  | $\begin{array}{ll} =10 & \forall=3 \\ =5 & \\ =2 & \\ & \end{array}$ |
| :---: | :---: |
| 1. How many children voted for strawberries as their favourite fruit? <br> 2. Which two fruits had an equal number of votes? <br> 3. How many more children liked apples compared to oranges? <br> 4. What is the difference between the votes for strawberry and the votes for grapes? <br> 5. How many children likes cherries and grapes? | 1. How many spiders were in the shed? <br> 2. How many spiders were in the garden and the bin? <br> 3. How more spiders were in the house than in the garage? <br> 4. What is the difference between the numbers of spiders in the shed and in the garden? |
| Money | Money |
| 1. |  |
| Desi has these coins. | Harry saves 20p coins. |
| How much does he have altogether? <br> $p$ | He has saved $\mathbf{£ 3 . 2 0}$ |
| 2. | How many coins has he saved? <br> Show how you work it out in the box. |


3. Circle 2 coins to make 10p

4. Janita bought a comic for 38p. She paid with a 50p coin. How much change did she get?

5.


How much altogether?

2. Tom bought a pencil for 15 p, a rubber for 10 p and a ruler for 30 p. He paid using a $£ 1$ coin. How much change did he get?

| $£ 1$ |  |  |  |
| :---: | :---: | :---: | :---: |
| $15 p$ | $10 p$ | $30 p$ | change |

3. 

Write the missing amounts in this sequence.
The same amount is added each time.

4. I can make 64 p with these coins:


Make 64p in 2 other ways
5.Grandma gives me jobs to do when I visit her.

|  | 10p for putting knives and forks on the table <br> 20p for clearing the dishes away <br> 20p for sweeping the floor. <br> If I stay with Grandma for 2 days and do each job twice each day, how much will I get paid? |
| :---: | :---: |
| Week 2 |  |
| 1. How many icing circles are on the little cookie? <br> 2. How many of the icing circles are red on the little cookie? <br> 3. How many of the icing circles are white on the little cookie? <br> 4. How many red icing circles do you think there are on the cookie behind the little one? <br> How many white icing circles do you think there are on the cookie behind the little one? <br> 5. Is there a pattern for icing the cookies? | Picture Maths <br> 1. How many children in the picture? <br> 2. What fraction of the cars are green? <br> 3. How many different vehicles are there? <br> 4. Are there more children than adults? <br> What's the difference between the number of adults and children? <br> 5. What maths questions can you ask about the picture? Give 3 questions. |


| Number Squares |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 |


| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |

1. How many jumps of 10 from 30 to 50 ?
2. How many 10 s in 40 ?
3. 10 more then 27 is $\qquad$ . 10 less than 27
4. How many jumps of 5 from 5 to 20 ?
5. 1 more than 13 is $\qquad$ . 1 less then 13 is
$\qquad$
6. 5 more than 13 is $\qquad$ . 5 less than 13 is
$\qquad$
7. 24 is 5 more than $\qquad$
8. 7 is 5 less than $\qquad$
Division
9. What is half of 8 ?

10. What is half of 16 ?



Division

1. How many spiders?

2. Can I share them equally between
a) 2?
b) 4 ?

Half of $\qquad$ is $\qquad$
Quarter of $\qquad$ is $\qquad$
3. How many spiders?


5. Put the hands on the clocks

3. The machine at the factory makes 10 Kitkats per minute.


How many chocolate bars does it make in
a) 5 minutes
b) 10 minutes?
4. How many minutes are there in half an hour?

5. If Milly leaves home at quarter past 10 and it takes her 15 minutes to walk to the park, what time will she arrive at the park?

## Week 1, Term 2-Measures: Comparing Mass

This week the children will be comparing the mass of items, building on the work they did last term.

Your child(ren) will need to use the language of 'heavier', 'lighter' and 'equal to'. Once confident in using this language they can use < , > and = to compare mass.

Your child(ren) will be asked to read scales that have intervals of either 10 or 100.

This is because at KS1, children are expected to compare weights using non-standard measures (such as cubes) and standard measures of grammes (g) and kilogrammes (kg).

Year 2 children should know that $1000 \mathrm{~g}=1 \mathrm{~kg}$.

We are going to look at some balance scales to compare which object is the heaviest or lightest.


## Activity 1 - Comparing Mass

1. 



Who weighs less? The fox or the horse? $\square$
2.


Who weighs the most?
The cat or the dog?


Now we are going to use some non-standard measures.
3.

The weight of the book in apples is $\qquad$ .

The weight of the pencil case in apples is $\qquad$ .

The weight of the trainers in apples is $\qquad$ .


The weight of the table lamp in apples is $\qquad$ .

Which of the objects above is the heaviest? Which of the objects above is the lightest? $\qquad$
4. Put in the right sign > or < , to compare the mass of the objects:

| table lamp | trainers |
| :---: | :--- |
| trainers | pencil case |
| pencil case | book |
| book | table lamp |

5. Draw the objects in order staring with the lightest.

## Activity 2 - Problem-Solving with Non-Standard Measures

1. 



How many cubes does the toy insect weigh? How do you know?
2.


How many cubes does the cake weigh? How do you know?
3.


How many cubes does the apple weigh? How do you know?
4.


How many cubes does the crown weigh? How do you know?
5. Which is the lightest object? $\qquad$
6. Which to objects weigh the same?
$\qquad$

## Activity 3: Comparing mass with standard measures

1. 



The baby weighs $\qquad$ kg .


The pumpkin weighs $\qquad$ kg.


The pair of shoes weighs $\qquad$ kg .


The ice bucket weighs $\qquad$ kg.

How much heavier is the baby than the ice bucket? $\qquad$ kg.
2.


The stack of books weighs $\qquad$ kg.


The camera weighs $\qquad$ kg.
3.
a) if I had 2 stacks of books, how heavy would they be?
b)if I had 3 pumpkins, how heavy would that be?
c) if my baby grew heavier by 1 kg every week, how heavy would my baby be in 4 - weeks time?
4.


The suitcase weighs $\qquad$ kg.


The fridge weighs $\qquad$ kg.


The watermelon weighs $\qquad$ kg.

5. When you travel on a plane with a suitcase, you are allowed a total weight of 20 kg which is the case plus your clothes. What can you pack in your suitcase?


How many pants, socks, vests, tshirts, jeans and trainers would you pack?

Draw or write what you would pack in the suitcase on the next page.

The suit case weighs $\qquad$ kg , so I have 20 - $\square$ kg for my clothes:

| Suitcase allowance: 20kg |  |
| :---: | :---: |
| Weight of <br> suitcase kg | Weight of clothes kg |

## Suitcase packing

## Activity 4: Reading scales

For this activity you need to remember how to count in 5 s and 10 s to read the scales:


| 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



The apple weighs:

$$
20 \mathrm{~g}+20 \mathrm{~g}+50 \mathrm{~g}=90 \mathrm{~g}
$$



## A. Counting in 1s:

Find the weight of the following objects.


1) Weight: $\qquad$ kg

2) Weight: $\qquad$ kg

3) Weight: $\qquad$ kg

4) Weight: $\qquad$ kg

5) Weight: $\qquad$ kg

6) Weight: $\qquad$ kg
B. Counting in 5 s and 10 s

1. How much does the banana weigh in grammes? $\qquad$ g
2. How much does the mug weigh in grammes? $\qquad$ g
3. How much does the teddy weigh in grammes? $\qquad$ g
4. How much heavier is the teddy than the banana? $\qquad$ g
5. I have 3 people in my family. If we each have a mug, how much would they weigh altogether?

| 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 110 120 130 140 150 160 170 180 190 |  |  |  |  |  |  |  |  |  |

3 mugs weigh:

## Activity 5: Problem solving using mass



| 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
| 210 | 220 | 230 | 240 | 250 | 260 | 270 | 280 | 290 | 300 |
| 310 | 320 | 330 | 340 | 350 | 360 | 370 | 380 | 390 | 400 |
| 410 | 420 | 430 | 440 | 450 | 460 | 470 | 480 | 490 | 500 |

1. When Mrs Choudry goes to the supermarket, she can buy cans of cola in packs of 6 or 10.
a) How much would 6 cans of cola weigh?
b) How would 10 cans of cola weigh?


Sophie's family are going to visit her grandma for a week during the summer holidays. She lives in Skegness, right near the seaside, so they are very excited.
Each member of the family has packed a suitcase. Sophie would like to take some toys with her.
The maximum weight the family can put in the car boot is 60 kg .
What weight of toys can Sophie take?

| 60 kg |  |  |  |
| :---: | :---: | :--- | ---: |
| Dad's | Mum's | Sophie's | toys |
| 21 kg | 25 kg | 11 kg | kg |


3. How much does the strawberry cheese cake weigh? $\qquad$ g

A blackcurrant cheese cake weighs 8 g more. What does the blackcurrant cheese cake weigh?

$\qquad$
4. It is Billie's birthday and she is having 7 friends over for tea. They all love strawberry cheese cake. Each person will get a quarter of a cheese cake for their pudding. How many cheese cakes will be needed? $\qquad$

How heavy will they be altogether? $\qquad$ g
5. Diago weighed himself on the bathroom scales:

How much did Diago weigh?


If you have some bathroom scales, can you weigh yourself? How much do you weigh?

## Week 2, Term 2: Measures - Temperature

For measuring temperature, children will be able to apply their skills of counting in $2 \mathrm{~s}, 5 \mathrm{~s}$ and 10s using different temperature scales.

The vocabulary that your child(ren) will need to understand and use in the context of measuring temperature:

- Degrees centigrade ${ }^{\circ} \mathrm{C}$
- Warmer (warmest)
- Cooler (coolest)
- Increased
- Decreased

With your child(ren), please ask them to look at the two thermometers below:


Explain that both thermometers show a temperature of $30^{\circ} \mathrm{C}$ but they look different because the thermometers have different scales. The first one has a scale in jumps of 5 whereas the second one has a scale in jumps of 10.

## Week 2 - Activity 1: Reading a thermometer (scale division of 2)

We use thermometers to measure the temperature - this helps us find out how hot or cold something is.

Thermometers can look very different:


## Scale - division of 2

1. What temperature do these thermometers show?

2. What temperature do these thermometers show?

3. Can you put the correct sign $>,<$ or $=$ between the thermometers:

4. For each pair of thermometers say which read the hottest $A$ or $B$


Thermometer reads the hottest.


| Thermometer |
| :--- |
| reads the hottest. |
|  |

5. Fill in the missing numbers on the thermometers by counting in $2 s$, then show the temperature underneath the thermometer:

$10^{\circ} \mathrm{C}$

$18^{\circ} \mathrm{C}$


Week 2 - Activity 2: Reading a thermometer (scale division of 5)

For this activity you will need to be able to count in 5 s .

1. What does the temperature show on the thermometers show? This time the scale is in jumps of 5 .

2. Put the correct sign $>,<$ or $=$, between the pairs of thermometers:

3. Fill in the missing numbers on the thermometers by counting in 5 s , then show the temperature underneath the thermometer:

4. Draw the temperature on the thermometers below:

5. Look at the thermometer below:


This temperature was taken at 10 o'clock in the morning.

It got warmer when the sun came out. At 2 o'clock in the afternoon it was $10^{\circ} \mathrm{C}$ higher. Show the new temperature on the thermometer.

In this activity you will need to count in 10s.
Write the temperature under each thermometer.

$-{ }^{\circ} \mathrm{C}$
$\longrightarrow{ }^{\circ} \mathrm{C}$


$\qquad$
$\qquad$
${ }^{\circ} \mathrm{C}$
$\qquad$
${ }^{\circ} \mathrm{C}$
${ }^{\circ} \mathrm{C}$
$\qquad$ ${ }^{\circ} \mathrm{C}$
2. Show the temperatures on the thermometers below

3. Look at the graph below and answer the questions

a) What day was the hottest?
b) Which 2 days had the same temperature in the morning?
c) Which day had the biggest difference in temperature from the morning to the afternoon?
d) Which day was the coldest in the morning?
e) What sort of weather could it have been on Sunday?

## Activity 4 - Comparing temperatures using various scales

For this activity you will need to be able to count in $2 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s .

1. Write the temperature under the thermometer

2. Compare the temperatures using the signs $>$, <or $=$

3. Write the temperature under the thermometer

4. Show the temperatures on the thermometers below:

5. Look at the thermometers below. These are the morning temperatures. If the temperature rises each day by $10^{\circ} \mathrm{C}$ each afternoon, show the new temperature:



Activity 5 - Problem solving with temperature

1. Lucy took the temperature at 10 o'clock in the morning and again at half past 4 in the afternoon. The difference in temperature was $8^{\circ} \mathrm{C}$. What could the temperatures have been?

| Morning temperature ${ }^{\circ} \mathrm{C}$ | Afternoon temperature ${ }^{\circ} \mathrm{C}$ |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

2. Compare the temperatures using $>,<$ or $=$

3. Look at the table showing the temperature at noon each day

| Day | Temperature at noon ${ }^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Sunday | $14^{\circ} \mathrm{C}$ |
| Tuesday | $20^{\circ} \mathrm{C}$ |
| Thursday | $21^{\circ} \mathrm{C}$ |
| Saturday | $24^{\circ} \mathrm{C}$ |

a) Was it getting warmer or colder throughout the week?
b) Which day was the hottest?
c) Which day was the coolest?
d) What was the difference in temperature between Sunday and Saturday?
4. Look at the graph below

a) What was the difference in temperature between Egypt and England?
b) Which country was the coolest?
c) Which countries had temperatures lower than $20^{\circ} \mathrm{C}$ ?
d) Which countries were warmer than $30^{\circ} \mathrm{C}$ ?
5. $A$ is Athens and $B$ is Belfast

a) What is the difference in temperature between Athens and Belfast?
b) Show a $10^{\circ} \mathrm{C}$ temperature rise for Athens.
c) Show a $8^{\circ} \mathrm{C}$ temperature rise for Belfast.

