| Year 2 maths – Summer 2 Week beginning: 22.6.20 YOU ARE NOT USING YOUR MATHS NO PROBLEM BOOK THIS WEEK!					
Theme	**Measurement Lesson 1 (of 2) Reading scales (length)**	**Measurement Lesson 2 (of 2) Reading scales (mass)**	**Missing number problems (counting on) Lesson 1 (of 2)**	**Missing number problems (using the inverse) Lesson 2 (of 2)**	**Number patterns Missing numbers in the sequence**
Factual fluency (to aid fluency)	**Long and short (Complete 10 questions)**	**Light and heavy (Complete 10 questions)**	**Addition facts – sums to 20 (Complete 10 questions)**	**Subtraction word problems (Complete 5 questions)**	**Complete the subtraction sentence (Complete 10 questions)**
Problem/ activity of the day **Remember, just like in class, you can still show the depth of your knowledge LINK**	(Lesson 1 resources below) **MAKING LINKS:** Earlier in the year you were learning to measure and compare length. Remind yourself here. You are going to consolidate your learning today. **THINK: (support below)** Can you help me solve this problem? How long is the pencil? **SEE: (model below)** Watch this video to see how to solve the problem. **DO:** Can you measure the length of different objects in your house using a ruler? Now try to solve the problems below.	(Lesson 2 resources below) **MAKING LINKS:** Earlier in the year you learnt how to read a scale and compare the weight of different objects. Remind yourself here. You are going to consolidate your learning today. **THINK: (support below)** Can you help me solve this problem? How heavy are these items? **SEE: (model below)** Watch this video to see how to weigh the items. **DO:** Now try to solve the problems below.	(Lesson 3 resources below) **MAKING LINKS:** Earlier in the year you looked at missing number problems in the classroom. You are going to consolidate your learning today. **THINK:(support below)** How do we solve missing number problems like this by counting on? $5 + \_\_\_ = 12$ **SEE: (model below)** Watch this video to see how to solve problems like these. **DO:** Now try to solve the problems below.	(Lesson 4 resources below) **MAKING LINKS:** Yesterday you looked at solving missing number problems by counting on. Today you are going to solve missing number problems using the inverse operation. **THINK:(support below)** How do we solve missing number problems like these by using the inverse operation? $\_\_\_ + 11 = 14$ $\_\_\_ - 5 = 10$ **SEE: (model below)** Watch this video to see how to solve problems like these. **DO:** Now try to solve the problems below.	(Lesson 5 resources below) **MAKING LINKS:** Earlier in the year you looked at finding missing numbers in a sequence. You are going to consolidate your learning today. **THINK:(support below)** Can you help me solve this problem? What are the missing numbers in this number pattern sequence? **SEE: (model below)** Watch this video to see how to solve problems like these. **DO:** Now try to solve the problems below.
Methods, tips, clues & checks	**Day 1 resources and answers (below)**	**Day 2 resources and answers (below)**	**Day 3 resources and answers (below)**	**Day 4 resources and answers (below)**	**Day 5 resources and answers (below)**

See below for resources to support you to THINK-SEE-DO

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DAY 1 RESOURCES:

THINK: Can you help me solve this problem? How long is this pencil?
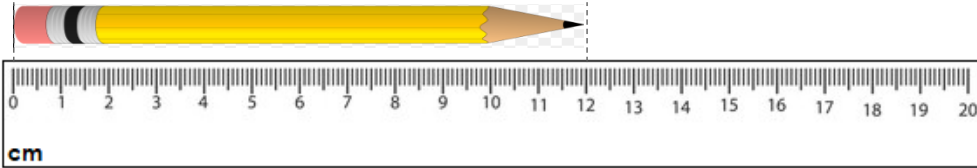
SEE: Optional video link.
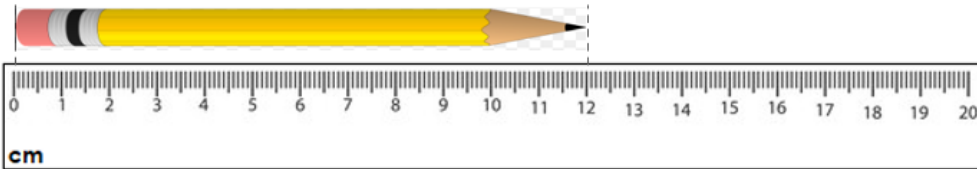
This pencil is 12cm long.
We can measure length in centimetres (cm) or metres (m). This is a centimetre ruler. Centimetres are a smaller unit of length.
We write cm for centimetre.
This centimetre ruler is 20cm.

When we measure using a ruler, we should start measuring from 0cm. Measuring can also start from another point. The pen below is not at the zero mark so we should count the number of units from 3cm to 16cm. There are 13 units from 3cm to 16cm. This pen is 13cm long.
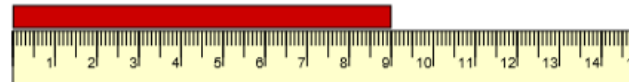

DO: Measure the length of the following. Don't forget to write the unit of measurement next to the number (cm)!
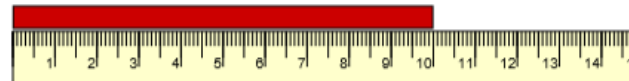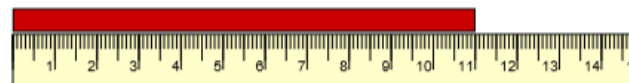

_____ cm

_____ cm

_____ cm

_____ cm
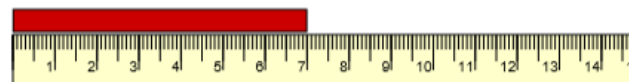

_____ cm
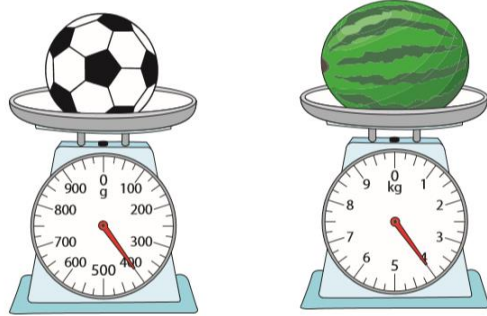

_____ cm

_____ cm

THINK: Can you help me solve this problem? How heavy are these items?


SEE: Optional video link.

We can use scales to find out how heavy different objects are. We can measure **mass** (or weight) using grams (g) or kilograms (kg). Grams are smaller than kilograms so we use grams to measure lighter objects and kilograms to measure heavier objects. We look closely at where the needle on the scale is pointing to when we read scales.
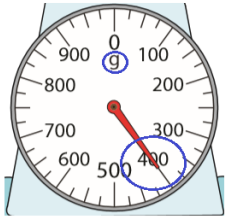

The needle is pointing towards 400 on the scale. We can see that we are measuring mass using grams (this is underneath the 0). The soccer ball weighs 400g. We say this as four hundred grams.
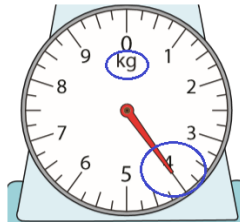

The needle is pointing towards 4 on the scale. We can see that we are measuring mass using kilograms (this is underneath the 0). The watermelon weighs 4kg. We say this as four kilograms.

DO: Read the scales and record the weight. Be sure to look at the unit of measurement and identify if your object is weighed in grams (g) or kilograms (kg).
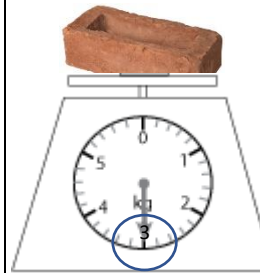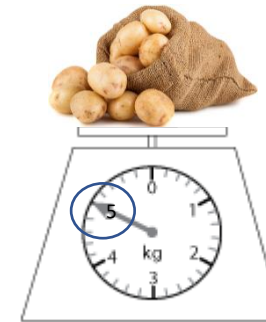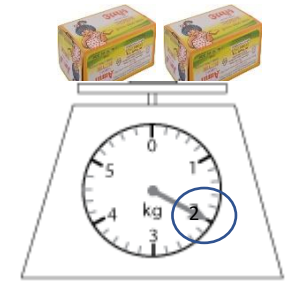

_____g

_____g

_____g

____ kg

_____ kg

_____ kg

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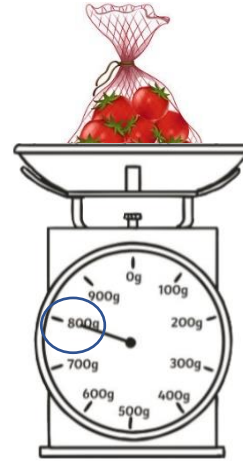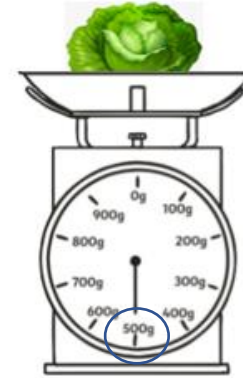
DAY 3 RESOURCES:

THINK: How do we solve missing number problems like this by counting on?

$$5 + \_\_\_ = 12$$

SEE: Optional video link.

For a problem like 5 + ___ = 12 you can use a number line to help you count on from 5 until you get to 12. This will help you find the missing number.

5   12

6, 7, 8, 9, 10, 11, 12

It took 7 jumps to get to the number 12.

5 + _7_ = 12

DO: Count the jumps on the number line to find the missing number.

1. 7 + ___ = 13

7   13

2. 8 + ___ = 19

8   19

3. 6 + ___ = 14

6   14

4. 19 + ___ = 24

19   24

5. 9 + ___ = 17
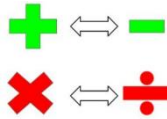
9   17

THINK: How do we solve missing number problems like these by using the inverse operation?

$$\_\_\_ + 11 = 14$$
$$\_\_\_ - 5 = 10$$

SEE: Optional video link.

Inverse operations are opposite operations.
Addition is the **inverse operation** of subtraction and multiplication is the inverse of division.

➕ ⇔ ➖
❌ ⇔ ➗

For a problem like $\_\_\_ + 11 = 14$ we can use subtraction to solve it by changing it to $14 - 11 = \_\_\_$. We can then count back 11 jumps from 14 to find our answer. $14 - 11 = $ **3** so **3** $+ 11 = 14$.

3   4   5   6   7   8   9   10   11   12   13   <u>14</u>

For a problem like $\_\_\_ - 5 = 10$ we can use addition to solve it by changing it to $10 + 5 = \_\_\_$. $10 + 5 = $ **15** SO **15** $- 5 = 10$.

<u>10</u>   11   12   13   14   15

DO: Use the inverse operation to solve these missing number problems. The inverse operations have been done for you.

1) $\_\_\_ + 3 = 10$

Count back to find the answer.

Inverse: $10 - 3 = \_\_\_$

___   8   9   10

2) $\_\_\_ - 5 = 7$

Count on to find the answer.

Inverse: $7 + 5 = \_\_\_$

7   8   9   10   11   ___

3) $\_\_\_ + 7 = 18$

Count back to find the answer.

Inverse: $18 - 7 = \_\_\_$

___   12   13   14   15   16   17   18

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DAY 5 RESOURCES:

THINK: Can you help me solve this problem? What are the missing numbers in this number pattern sequence?

SEE: Optional video link.

To find the missing numbers in the number pattern sequence, first you need to work out what the numbers are going up in. In this pattern, we are adding 1 each time so we need to add 1 to find the missing numbers.
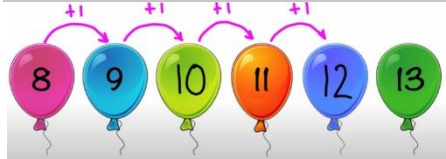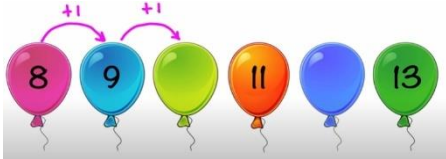
The missing numbers in this pattern are 10 and 12.

Missing number patterns can also count down.

Once again, you need to work out what the numbers are going **down** in to then find the missing numbers. We are subtracting 2 each time.

The missing numbers in this pattern are 8 and 4.

DO: Find the missing numbers in these number pattern sequences:
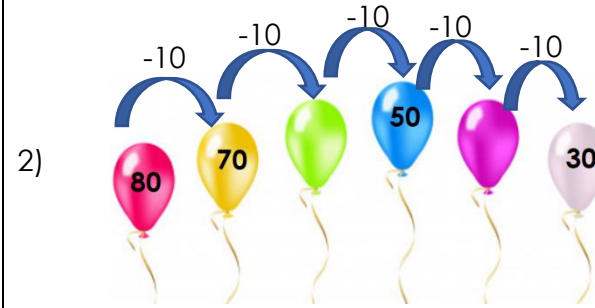
1) +5, +5, +5, +5, +5

10, 15, 20, _, _, 35

2) -10, -10, -10, -10, -10

80, 70, _, 50, _, 30

3) +2, +2, +2, +2, +2

5, 7, 9, _, 13, _

4) -5, -5, -5, -5, -5

55, 50, 45, _, _, 30

DO: Measure the length of the following. Don't forget to write the unit of measurement next to the number (cm)!

6cm

13cm

9cm

10cm

4cm

11cm

7cm

DO: Read the scales and record the weight. Be sure to look at the unit of measurement and identify if your object is weighed in grams (g) or kilograms (kg).

800g

500g

250g

3kg

5kg

2kg

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DAY 3:

<u>DO:</u> Count the jumps on the number line to find the missing number.

1. $7 + \_6\_ = 13$

7   13

2. $8 + \_11\_ = 19$

8   19

3. $6 + \_8\_ = 14$

6   14

4. $19 + \_5\_ = 24$

19   24

5. $9 + \_8\_ = 17$

9   17

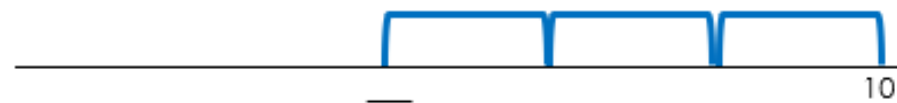**DAY 4:**

<u>DO:</u> Use the inverse operation to solve these missing number problems. The first few inverse operations have been done for you and then you need to figure out the inverse by yourself.

1) $\_7\_ + 3 = 10$

Count back to find the answer.

Inverse: $10 - 3 = \_7\_$

                              10

2) $\_12\_ - 5 = 7$

Count on to find the answer.

Inverse: $7 + 5 = \_12\_$

7

3) $\_11\_ + 7 = 18$

Count back to find the answer.

Inverse: $18 - 7 = \_11\_$

                              18

DAY 5:

DO: Find the missing numbers in these number pattern sequences:

1) 10, 15, 20, 25, 30, 35

2) 80, 70, 60, 50, 40, 30

3) 5, 7, 9, 11, 13, 15

4) 55, 50, 45, 40, 35, 30