# Home Learning Pack

## Year 5
## Spring Term Week 2

## Home Learning Links

**Oak National Academy**
Oak National Academy is an online classroom and resource hub.  It provides high-quality video lessons and resources to support teachers, parents and pupils.
www.thenational.academy

**BBC Bitesize**
With BBC Bitesize it is easy to keep learning at home.  You can access regular daily lessons in English, maths and other core subjects.
https://www.bbc.co.uk/bitesize

**World Book Online**
World Book online have just made their fabulous collection of over 3,000 e-books and audiobooks available for free for children to access at home. They have books suitable for all ages. Click on the following link to access them.
https://worldbook.kitaboo.com/reader/worldbook/index.html?usertoken=Mjk5MzQ6MTpJUjA5MjAxNjoy OmNsaWVudDE2OTc6MTY5NzoyMjE2Mjg4OjE6MTU4NDM4MDExMzA2Mjp1cw%3D%3D

**Read Works.org**
Read Works offers access to 3000+ comprehension for all age groups. Just sign up for a free account to access fantastic texts.
https://www.readworks.org/

**Tutortastic**
An online platform with tutorials and videos for home learning.
https://www.tutortastic.co.uk/blog/homelearning

**Education Quizzes**
A series of short quizzes for children to complete related to the National Curriculum subjects. Just select KS1 for Reception, Year 1 & Year 2 and select KS2 for Years 3-6.
https://www.educationquizzes.com/ks1/

**Top Marks**
A range of activities here but especially good interactive activities for maths.
https://www.topmarks.co.uk/

**Classroom Secrets**
Classroom Secrets Kids is offering free access to everyone until the end of April 2020. The platform is aimed at primary aged children and covers subjects such as maths, reading, grammar and spelling. The platform is really child-friendly so that they're able to access it on their own. There are a load of games and interactive activities from phonics to SATs
https://kids.classroomsecrets.co.uk/

**National Geographic**
National Geographic is a great platform for learning and it's totally free. There are online games, resources and competitions, too.
https://www.natgeokids.com/uk/teacher-category/primary-resources/

**Reading Eggspress**
Reading Eggspress has lots of reading activities including comprehension and retrieval questions to have a go at. Your child's Username and Password should be written in his Homework Book.

We have been learning about division this week, mostly looking in-depth at partitioning and we will transition into using the short method for division. Here are some great maths games to play on Laptops or iPads.

[https://www.topmarks.co.uk/Search.aspx?q=division](https://www.topmarks.co.uk/Search.aspx?q=division)

**Times Tables Rockstars**

This is a great times tables game, practice all of the tables up to 12 x 12. Log- in should be in Homework book/ Reading diary.

[https://ttrockstars.com/](https://ttrockstars.com/)

## Are, are, are, are
## Care, area, dare

**Adverbials** are words or phrases that give more information to the sentence.

**"I discovered fronted adverbials earlier today."**

Where is the adverbial?

**Fronted adverbials**

A fronted adverbial is when the adverbial word or phrase is moved to the front of the sentence, before the verb.

**"Earlier today, I discovered fronted adverbials."**

Where is the fronted adverbial?

## Mead hall

What can you see in this picture?

What would happen in a Mead hall?

Does this image match Michael Morpurgo's description?

# Main Activity

Inside the Mead hall what would you:

- See?

- Smell?

- Taste?

- Touch?

- Hear?

## Monday Maths

**1** What is 49+54?
Answer using column addition

**2** What is 134-47?
Answer using column subtraction.

**3** What is the value of the circled digits?
- 0.3④
- 0⑦9
- ⓪47

**4** Circle the tenths in the following numbers.
- 0.71
- 0.21
- 0.98

Misconception:
James says that the 4 in 0.24, represents the hundredths. Is he correct? Explain your answer.

**Day 1: Place value addition and subtraction of numbers with two decimal places.**

## 4.03 + 0.7

What does the 3 represent?

Write the answer to the addition on your whiteboards.

What is the place value of this 7?

## 7.38 − 0.08

What is the place value of this 3?

Write the answer to the subtraction on your whiteboards.

What does the 8 represent?

## 7.3          7.03

The value of the 3 changes according to its place in the number. How many hundredths is 0.3?

3 tenths is 30 hundredths. $^3/_{10} = {}^{30}/_{100}$
So, 7.3 is 27 hundredths more than 7.03.
£7.30 is 27p more than £7.03.

### Place value addition and subtraction
#### Sheet 1

1. $4 + 0.53$
2. $6.07 + 0.5$
3. $5.78 - 0.08$
4. $8.64 - 0.6$

5. $8.23 + 0.1$
6. $4.56 + 0.01$
7. $8.47 - 0.01$
8. $9.35 - 0.1$

9. $6.21 + 0.2$
10. $9.34 - 0.2$
11. $8.25 + 0.03$
12. $7.38 - 0.03$

13. $9.34 + 0.11$
14. $8.53 - 0.11$
15. $4.73 + 1.01$
16. $8.14 - 1.01$

17. $4.27 + 1.2$
18. $8.75 - 1.02$
19. $3.24 + 1.23$
20. $9.87 - 1.81$

**Challenge**

Start at 4.36. Add or subtract tenths and hundredths to make an addition and subtraction chain ending with the number 5.02.

# Challenge

Divide 47,310 by 10 repeatedly until you get a number that is less than 100.
Write that number.

_____

Write the next two numbers in each sequence.

0.41   4.1   ____   ____

2.05   20.5   ____   ____

43,020   4302   ____   ____

_____

## Monday PE

Netball

Practice pivoting on one leg. This means that you can only move one leg when you are holding the ball. To move this leg, you can rotate the angle of your body in different directions. Have a go.

Then practice a bounce pass. A bounce pass is where the ball must bounce off the floor once before it reaches your teammate. The ball cannot bounce more than once.

## Tuesday English

**rew, rew, rew, rew**

## LO: To use the 5 senses to describe a setting.

| See | Smell |
|---|---|
| | |
| **Touch** | **Hear** |
| | |

1. Create 5 sentences in each box that describes the following senses in the Mead hall:

• See

• Smell

• Feel

• Hear

2. Each sentence MUST begin with a fronted adverbial that describes where, when or how you are sensing something.

## Here's mine

High above, the vibrant tapestries hung like paintings off the ceiling; giving any visitor a warm welcome into the hall.

## Tuesday Maths

| 1 What is 4x10? Show your answer in a place value chart. | 2 What is 70x100? Show your answer in a place value chart. |
|---|---|
| 3 What is 9,000 divided by 100? Show your answer in a place value chart. | 4 What is 11,000 divided by 1,000? Show your answer in a place value chart. |

Misconception: Martin says that when you divide a number on a place value chart by 10, 100 or 1000, the digits move to the left. Is he correct? Explain your answer.

## Multiplying and dividing by 10, 100 and 1000
### Sheet 2

1. $456.8 \times 10$
2. $4568 \div 10$
3. $2.76 \times 10$
4. $843 \div 100$

5. $47.3 \times 100$
6. $783 \div 100$
7. $45.62 \times 100$
8. $783.4 \div 10$

9. $45.74 \times 1000$
10. $3620 \div 1000$

11. $348.2 \times \boxed{\phantom{000}} = 3482$

12. $34{,}820 \div \boxed{\phantom{000}} = 34.82$

### Challenge

Complete the following calculations.

$78.43 \times \square = 7843$

$78.43 \times \square = 78{,}430$

$6450 \div \square = 64.5$

$6450 \div \square = 6.45$

# Challenge

True or false?

$4030 \div 100 = 43$

$1.09 \times 100 = 190$

$0.09 \times 10 = 0.9$

$7000 \div 1000 = 0.7$

_____

Rounding to nearest tenth

Tick (a) or (b)

(a) $20.07 \rightarrow 20$

(b) $20.07 \rightarrow 20.1$

Rounding to nearest whole number

(a) $20.09 \rightarrow 21$

(b) $20.09 \rightarrow 20$

## Tuesday Science

### Investigating properties of materials

## Activity

- Take a look at the materials on your desk.

- Are they fit for purpose?

- What is good about them?

- What is bad about them?

- What materials would you use instead?

## Suggested Materials

- Plastics (*plastic bags, polystyrene, bottles, melamine plates*)

- Metals (*aluminium foil, stainless steel cutlery, iron hammers/saws*)

- Woods (*if possible a hard wearing maple or walnut chopping board, and a less robust pine or oak chopping board*)

- Stone (*chalk, granite*)

- Fabric (*woven material, knitted wool, cotton*)

- Glass

- Rubber

- Cork

- Vinyl

Can you group these materials into two separate groups? E.g.

| Hard | Soft |
|------|------|
| Glass | Cotton |

## Investigation

- You have been put in charge of running a local food truck at the festival. You need to create a surface which will allow you to prepare the food. This surface must be:
  - Non-absorbent
  - Hard
  - Easy to clean
  - Smooth
- You will need to justify your choice of material with valid, scientific reasoning.

## The materials you will be investigating will be

- Plastic Bags
- Wooden logs
- Aluminium foil
- Sponge
- Wire wool
- Tin
- Metal spoons
- Sandpaper
- Bubble wrap

- Predict which material you think will be the best material to use?

- Challenge – Which material do you think will be the worst?

Pick two materials that are on the list. You will then need to carry out your experiment. Here is your results table. This details what you need to test to determine what the best material will be. An example has been done for you.

| Material | Hardness test | Is it absorbent? | Smooth or rough? |
|----------|---------------|------------------|------------------|
| GRANITE | No scratch evident | No | Very smooth |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Wednesday English

| Antonyms: | Prefix: | Root word: | Suffix: |
|---|---|---|---|
| | | | |

| Synonyms: | Word: **kinsmen** | Etymology: |
|---|---|---|
| | | |

**Definition:**

**Sentences:**

## LO: Plan a setting description

Imagine you have been invited into a Mead hall for an evening of celebration. It is your first time inside and you don't know what to expect.

What do you see?

What do you hear?

What do you smell?

What do you feel?

How do these senses make you feel as you are celebrating with the Danes?

1. Using the senses you have been exploring, write 3 sentences for each sense about the Mead hall.

• See

• Hear

• Smell

• Feel

2. Each sentence must begin with a fronted adverbial.

3. Each sentence must finish with an effect each sense has on the reader.

## Here's mine

High above, the vibrant tapestries hung like paintings off the ceiling; giving any visitor a warm welcome into the hall.

From the middle of the hall, a bright hearth lit the room; extending warmth and comfort to those around.

From all around, the sound of song and laughter filled the air.  It is enough to make anyone want to sing and cheer.

# Wednesday Maths

| | |
|---|---|
| **1** If my number is 1-4, do I round up or down? | **2** If my number is 5-9, do I round up or down? |
| **3** Round these numbers to the nearest 10.<br>• 7<br>• 4<br>• 2 | **4** Round these numbers to the nearest 100.<br>• 74<br>• 150<br>• 249 |

## Misconception:
Jude says that 49 rounded to the nearest 100 is 100. Is he correct? Explain your answer.

**Day 3: Round decimals to the nearest whole and tenth.**

| 2 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 | 3 |

Is 2.3 nearer to 2 or 3?

What about 2.5? What multiple of ten would you round 25 to? So, we round 2.5 up to…

If we are rounding 2.3 to the nearest whole number, 2.3 rounds to 2.

**Day 3: Round decimals to the nearest whole and tenth.**

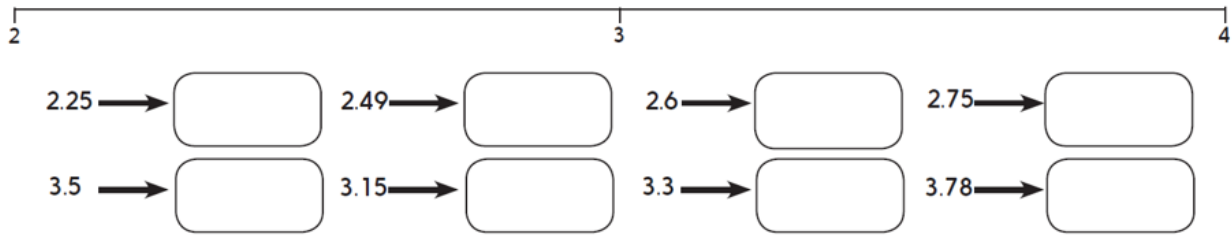Write a number less than 6 with two decimal places that rounds up to 6.

What is the smallest number with two decimal places that rounds up to 10?

## Round decimals to the nearest tenth and whole number
### Sheet 2

Mark 2.25, 2.49, 2.6, 2.75, 3.5, 3.15, 3.3 and 3.78 on this number line. Round each number to the nearest whole and record below.

```
2                              3                              4
```

2.25 ⟶ ☐   2.49 ⟶ ☐   2.6 ⟶ ☐   2.75 ⟶ ☐

3.5 ⟶ ☐   3.15 ⟶ ☐   3.3 ⟶ ☐   3.78 ⟶ ☐

Mark 5.26, 5.35, 5.51, 5.83, 6.04, 6.95, 6.52 and 6.19 on this number line. Round each number to the nearest tenth.

```
5                              6                              7
```

5.26 ⟶ ☐   5.35 ⟶ ☐   5.51 ⟶ ☐   5.83 ⟶ ☐

6.04 ⟶ ☐   6.95 ⟶ ☐   6.52 ⟶ ☐   6.19 ⟶ ☐
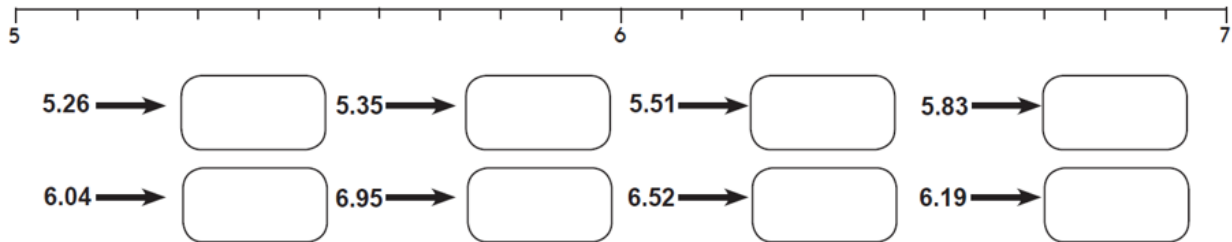
Mark two numbers on this line that round to 4 and two that round to 5.

```
4                              5
```

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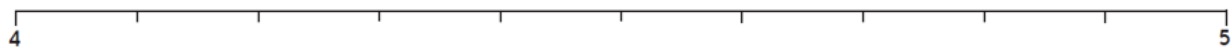
### Problem solving and reasoning questions

Divide 47,310 by 10 repeatedly until you get a number that is less than 100.  Write that number.


Write the next two numbers in each sequence.

0.41   4.1   ____   ____

2.05   20.5   ____   ____

43,020   4302   ____   ____


True or false?

4030 ÷ 100 = 43                    1.09 x 100 = 190

0.09 x 10 = 0.9                    7000 ÷ 1000 = 0.7


Rounding to nearest tenth. Tick (a) or (b)

(a)       20.07 -> 20                    (b)       20.07 -> 20.1

Rounding to nearest whole number

(a)       20.09 -> 21                    (b)       20.09 -> 20

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### Wednesday DT

# LO: To examine an instrument and analyse it's materials.

## Rain Gauges

Can you identify:

- The funnel
- The body
- The receiver
- The base

How do each of these rain gauges work?

# Main Activity

Using the photos on each table, decide how we might design our own rain gauge.

You will need:

- A funnel

- A receiver

- A base

- A body

- a measuring scale.

What do you think you can use for each part?

What materials would be fit for purpose?

What materials do we have access to?

Make a list of your materials and why you think they would be best suited for each part.

## Thursday English

# New, new, new, new

Semi-Colons:  Google this link:

[How to use a semi-colon - BBC Bitesize](How to use a semi-colon - BBC Bitesize)

**Rewrite the sentences out below, inserting semi-colons in the correct place.**

1) Tom reads novels his friends read comics.

2) Our goal was to run eight miles we only ran four miles.

3) Call me tomorrow I will give you my answer then.

4) English was Anna's hardest subject additionally, she struggled with science.

5) Susan loves to swim her brother likes to dive.

6) My hair is very wet I have just washed it.

# LO: To write a setting description using the 5 senses.

1. Using the sentences from yesterday, write 2 paragraphs that describes the Mead hall.

2. Your paragraphs must include:
• What you can see
• What you can smell
• What you can hear
• What you can feel

3. Each description must also be followed by the effect each sense has on the reader.

**Challenge: Can you write a brief description of the Mead hall after the battle.**

# Thursday Maths

| | | | |
|---|---|---|---|
| **1** | Round these numbers to the nearest 10.<br>• 28<br>• 73<br>• 99 | **2** | Round these numbers to the nearest 100.<br>• 454<br>• 1472<br>• 123 |
| **3** | Round these numbers to the nearest whole.<br>• 0.5<br>• 0.23<br>• 0.67 | **4** | Round these numbers to the nearest tenth.<br>• 0.71<br>• 0.84<br>• 0.19 |

Misconception:
Jim says that 0.47 rounded to the nearest tenth is 0. Is he correct? Explain your answer.

Use expanded addition or compact addition to work out 4.72 + 3.45. Round each number to the nearest whole and add to check whether the answer seems reasonable.

$$45.7 + 3.45$$

```
  4 5 . 7
+ 3 . 4 5
_____
```

1. Copy this square.

| + | 0.7 | 0.2 | 1.1 | 1.8 |
|---|---|---|---|---|
| 1.3 | | | | |
| 0.5 | | | | |
| 0.6 | | | | |
| 1 | | | | |

| + | 0.7 | 0.2 | 1.1 | 1.8 |
|---|---|---|---|---|
| 1.3 | 2 | 1.5 | | |
| 0.5 | 1.2 | 0.7 | | |
| 0.6 | 1.3 | | | |
| 1 | | | | |

| + | 0.7 | 0.2 | 1.1 | 1.8 |
|---|---|---|---|---|
| 1.3 | ~~1.2~~ | (1.5) | ~~1.8~~ | ~~1.0~~ |
| 0.5 | ~~1.2~~ | ~~0.7~~ | (1.6) | ~~1.8~~ |
| 0.6 | (1.3) | ~~0.2~~ | ~~1.2~~ | ~~1.4~~ |
| 1 | ~~1.2~~ | ~~1.2~~ | ~~1.1~~ | (2.8) |

2. Add the numbers in the top row and left column to complete the square.
3. Choose a number on the square and circle it.
4. Cross out all the numbers in the same row and column.
5. Choose another number – one that is not crossed out – and circle it.
6. Cross out all the numbers in the same row and column.
7. Repeat this for the third time.
8. Circle the remaining number.
9. Add the four circled numbers.
10. Now add the eight numbers round the outside of the square.
11. Finally add the numbers in each diagonal.

Try this again using the square below. What do you notice about the numbers here compared to those on the first square? Can you predict what may happen this time?

| + | 1.7 | 1.2 | 2.1 | 2.8 |
|---|---|---|---|---|
| 2.3 | | | | |
| 1.5 | | | | |
| 1.6 | | | | |
| 2 | | | | |

Try this again, starting with the original square, but this time adding $\frac{1}{10}$ to each number.

**Challenge**

Use the original square to invent a new square where the same thing happens.

## Adding decimals

Round each number to the nearest whole number and add to make an estimate.
Add each pair of numbers to find an exact total.

1. $34.5 + 27.3$      6. $5.42 + 6.37$

2. $62.7 + 23.5$      7. $4.48 + 3.27$

3. $24.8 + 43.9$      8. $5.63 + 2.84$

4. $46.7 + 25.5$      9. $6.57 + 2.48$

5. $47.8 + 34.4$      10. $7.85 + 4.56$

How accurate were your estimates?

# Challenge

Sometimes/ Always/ Never... 'If you add two 2-place decimal numbers, the answer also has 2 decimal places.'

_____      _____

Jamie added 6.77 to a number and his answer was 20.  What number did he start with?

_____      _____

### Thursday Science

# Thermal Insulators Investigation

- A Thermal conductor is an **object that can conduct heat through itself**. These objects or elements heat up quickly and also heaten up their surroundings.

- As was written, thermal insulation is based on the use of substances with very **low thermal conductivity**. These materials are known as thermal insulators. Common thermal insulators are wool, fiberglass, rock wool, polystyrene, polyurethane, and goose feather etc.

In this investigation you will be testing materials to see their effectiveness in insulating cold and hot items.
The materials you will be testing are:
- Wool
- Aluminium (Kitchen) foil
- Blue (paper) roll/toilet roll

You will need:
- A cup
- Ice cubes (at least 3)
- Wool
- Aluminium foil
- Blue (paper) roll/toilet roll
- A thermometer

Method
1. You will be wrapping your ice cube inside of one of the materials.
2. You will then place this into a cup.
3. Next, you need to measure and record the starting temperature of the ice cube.
4. After that, wait 5 minutes before measuring and recording the finishing temperature.
5. Then, calculate and record the temperature change for that material.
6. Repeat these steps for each material.
7. Finally, write a paragraph explaining which material was the best insulator and why.

# New, new, new, new
# Knew, renew

<u>LO: Editing a piece of writing</u>

Can you make this better?

The hall had a fie in the middle and it was hot.  There was wood all around and it smelled nice.  The hall ws big.  The hall was made of wood and there was food everywhere. There wuz people everywhere. Then Beowulf had a fight with Grendel and ripped his arm off.

1.    Finish your setting description.

2.    Read through your paragraphs.   Do you have:
• What you can see
• What you can smell
• What you can hear
• What you can feel
• Fronted adverbials
• The effect each sense has on the reader
• High-level vocabulary

Challenge: Choose 3 sentences and re-write them completely

| | 🙂 | 🤔 | 😣 |
|---|---|---|---|
| What you can see | | | |
| What you can smell | | | |
| What you can hear | | | |
| What you can feel | | | |
| Fronted adverbials | | | |
| The effect each sense has on the reader | | | |
| High-level vocabulary | | | |

# Friday Maths

**1** What is 5 + 7 + 8? Work this out using column addition.

**2** What is 20 + 14 + 47? Work this out using column addition.

**3** What is 0.47+0.32? Work this out using column addition.

**4** What is 0.71+0.13? Work this out using column addition.

<u>Misconception:</u>

Michelle says that 0.21+0.51=5.21. Is he correct? Explain your answer.

# Shot put results

Who do you think won the shot put event? Find the total of the two throws for each athlete. Then rank the athletes.

| Athlete | 1st throw | 2nd throw |
|---------|-----------|-----------|
| Ceri | 21.67m | 24.79m |
| James | 22.12m | 24.65m |
| Gurpit | 22.45m | 21.89m |
| Natasha | 23.57m | 22.68m |
| Alice | 22.56m | 23.13m |

## Problem solving and reasoning questions

Sometimes/ Always/ Never... 'If you add two 2-place decimal numbers, the answer also has 2 decimal places.'

Jamie added 6.77 to a number and his answer was 20. What number did he start with?

Write the missing digits:

4.9☐   ☐+   .78 ⊟8.   6

Ali's homework might need correcting.
Correct any he has wrong and say what he did wrong.

```
  2. 7 5        3. 4.2
+ 5. 9 5      + 5. 5 7
  7. 6 0        8. 9 9

  4. 8 3        2. 4 7
+ 1. 9 3      + 6 8.5
  5. 7 6        9 3. 2
```

<u>Friday Geography</u>

Where did the Angles, Saxons and Jutes come from?

**Activity**

You will complete a labelled a map of Britain and northwest Europe with key countries and seas labelled and arrows to show the routes taken by the invaders.

**Bronze:** Children will use maps of Britain and northwest Europe to identify key locations and to establish the route taken by the invaders.

**Plenary**

How would the invaders have travelled to Britain?

How far would they have come?

How long it might have taken and possible issues faced by the invaders.