Science

Find out all you can about 'light'. Research different light sources and find out whether you have anywhere in your home which is completely dark. What light sources do you have at home?

English

Using the video 'The Lighthouse' (link sent with resources) answer the reading questions sent home in the resources pack.

Computing

Make a mind map or a PowerPoint all about light.

Maths

Have a go at the counting and multiplication worksheets.

How many bulbs does it take to change a lighthouse?

Art/ DT

Design your own shadow puppet theatre based on your science learning. Which material is best for your puppets?

PE

Continue with the Birmingham School Games Challenge.

PDW

Begin your lockdown diary (sent home in the resources) to highlight the positive and negative thoughts and feelings you might have during this time.

English

Follow the link below to access our text this week- The Lighthouse. Once you have watched the film, have a go at answering the questions below.

https://www.literacyshed.com/the-lighthouse.html

1. When do you think the story is set?

2. Does the lighthouse keeper like his neighbours? Why do you think this?

3. What words do you think the lighthouse keeper would use to describe the people in the village?

4. What do you think the lighthouse keeper would be saying to himself when the lantern at the top of the lighthouse goes out?

5. How do you think he feels when he sees the ship?

6. How does the lighthouse keeper feel at the end?

7. Do you think he feels differently about his neighbours at the end?

8. Predict what you think might happen next time there is a party in the village.

9. Summarise the short film.

Now read this short extract and answer the questions below.

High above the village, at the edge of the cliff, sat the Briar's Rock lighthouse. Its bright light danced over the rooftops and out to sea; the darkness was no match for its strength. In the village, the narrow walkways and paths were bathed in the pale light of a milky moon and bare sinuous trees awaited their springtime leaves. Amber lights shone from friendly windows and inside noisy villagers danced and applauded. Houses of all sizes dotted the grassy clifftop, and beyond the cliffs and the pretty, little village, the restless sea gurgled and churned. Light swept the village. The villagers cheered. Light swept the village. More applause. The lighthouse, which didn't benefit from the same warm glow of the beam, or the same cheeriness of the village, stood stoically watching in the near darkness.

1. What is the name of the lighthouse?

2. Why do you think the moon is described as milky?

3. Why is the word 'swept' used to describe how the light moves?

4. Which word is used to describe the sea?

5. How is the village described so that it seems cheery?

6. Why do you think the villagers cheered?

Maths

Count in steps of 100 and 50
Sheet 2

Write the missing numbers in these sequences:

48, 148, ☐ , ☐ , 448, ☐ , ☐ , 748, ☐ , ☐ , 1048

3, 103, ☐ , ☐ , ☐ , ☐ , 603, ☐ , ☐ , ☐ , 1003

28, ☐ , 228, ☐ , ☐ , ☐ , ☐ , 728, ☐ , 928, ☐

1010, 910, ☐ , ☐ , 610, ☐ , ☐ , ☐ , 210, ☐ , ☐

50, 100, 150, ☐ , ☐ , ☐ , 350, ☐ , ☐ , ☐ , 550

7, 57, 107, ☐ , ☐ , ☐ , 307, ☐ , ☐ , 457

35, 85, ☐ , ☐ , 235, ☐ , ☐ , 385, ☐ , ☐ , ☐

94, ☐ , 194, 244, ☐ , ☐ , 394, ☐ , ☐ , 544, ☐

Challenge

Now make up your own counting in 50 sequences.

Missing numbers

Copy these sequences and fill in the missing numbers.

4, 8, ☐ , 16, ☐ , ☐ , 28, 32, ☐ , 40, ☐ , ☐ , 52, ☐ , ☐ , 64, 68,

☐ , ☐ , ☐ , 84, 88, ☐ , 96, ☐

8, 16, ☐ , 32, ☐ , ☐ , ☐ , 64, 72, ☐ , ☐ , 96, ☐

Circle the numbers that appear in both sequences.
What do you notice?
How can you explain this?

Challenge

Complete this sequence:

6, 12, 18, ☐ , 30, 36, ☐ , 48, ☐ , ☐ , 66, 72, ☐ , ☐ , ☐ , ☐ , ☐ .

Can you find any numbers that are in all three sequences?

What's the pattern?
Sheet 1

Write the next three numbers as well as the rule for each sequence.

1. 2, 6, 10, ☐ . ☐ . ☐ .

    Rule: _____

2. 12, 22, 32, ☐ . ☐ . ☐ .

    Rule: _____

3. 48, 40, 32, ☐ . ☐ . ☐ .

    Rule: _____

4. 90, 80, 70, ☐ . ☐ . ☐ .

    Rule: _____

5. 22, 30, 38, ☐ . ☐ . ☐ .

    Rule: _____

6. 45, 40, 35, ☐ . ☐ . ☐ .

    Rule: _____

Problem solving and reasoning questions

Write the next four numbers in these sequences:

- 4, 8, 12, …
- 13, 63, 113, …
- 8, 16, 24, …
- 100, 96, 92, …
- 341, 441, 541, …

Create a sequence of ten numbers where you count on in 8s from an odd number.

Harry says, 'If I count in 4s, starting at 3, I won't say 30, but I will say 303.' Do you agree? Explain your ideas.

Using your knowledge of the 2, 3, 4, 5, 8 and 10 times tables, complete the multiplication grid.

x	1	2	3	4	5	6	7	8	9	10
1						6	7		9	
2						12	14		18	
3						18	21		27	
4						24	28		36	
5						30	35		45	
6						36	42		54	
7						42	49		63	
8						48	56		72	
9						54	63		81	
10						60	70		90	

For each of these calculations write one related multiplication and one related division fact.

3 x 12 = 36 [   ] [   ]

4 x 8 = 32 [   ] [   ]

5 x 6 = 30 [   ] [   ]

3 x 7 = 21 [   ] [   ]

2 x 9 = 18 [   ] [   ]

Problem solving and reasoning questions

Write the missing numbers.

$\boxed{}$ x 8 = 32

6 x $\boxed{}$ = 48

9 = 36 ÷ $\boxed{}$

$\boxed{}$ x 4 = 48

5 = $\boxed{}$ ÷ 8

Write 8 x 6 = 48 in the middle of a space and circle it.

Draw 8 spider legs out from it.

Write 8 related number sentences using this central fact.

Always true, sometimes true or never true?

- 6 x 8 is the same as 4 x 12.
- Dividing a number by 3 gives an odd answer.
- Even numbers divide by 8 to leave no remainder.

Science

With your adults or using the internet research all you can about light! Perhaps you could investigate how light travels and what we need to be able to see objects in the dark. You could also have a look at different light sources that you have at home.

There is a short experiment you could do, all you need is a cardboard box, a pencil, a torch and some small toys.

1. First, turn your box face down on the table. Fold out any flaps.

If you were inside the box, what do you think it would be like? Why?

2. Choose a few items from around the home. Arrange them under the box so you have an item in each corner and a few in the middle.

3. Make a hole in the top of the box using a sharp pencil. Look into the box through the hole. What can you see? Why?

4. Make some more holes in the top of the box. Each time look down through one of the holes.
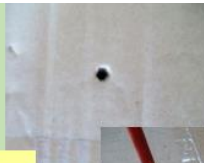
Can you see any of the objects inside? Why?

5. Try making a few holes on one side of the box.

Can you see the objects when you look from top?
Can you see the objects when you look from the side? Why?

6. Try shining a torch into one of the holes and looking through the other. What can you see in the box? Why?

With your adult, you could also try and see if there is anywhere in your home which is completely dark. See if you can find out what darkness is? If you do have a space which is completely dark, you could experiment to see whether you can see any colours in the dark and have a go at recording this on a table.

What Colours and Materials Show up Best in the Dark?

Colours that are easy to see in the dark	Those that are neither easy or hard to see	Colours that are hard to see in the dark

Is there anything that the easy to see squares had in common?   Were there any surprises?

I noticed that...   I think this is because ...

What Materials Show up Best in torchlight?

Black clothing	White clothing	Reflector	High Visibility material	Mirror

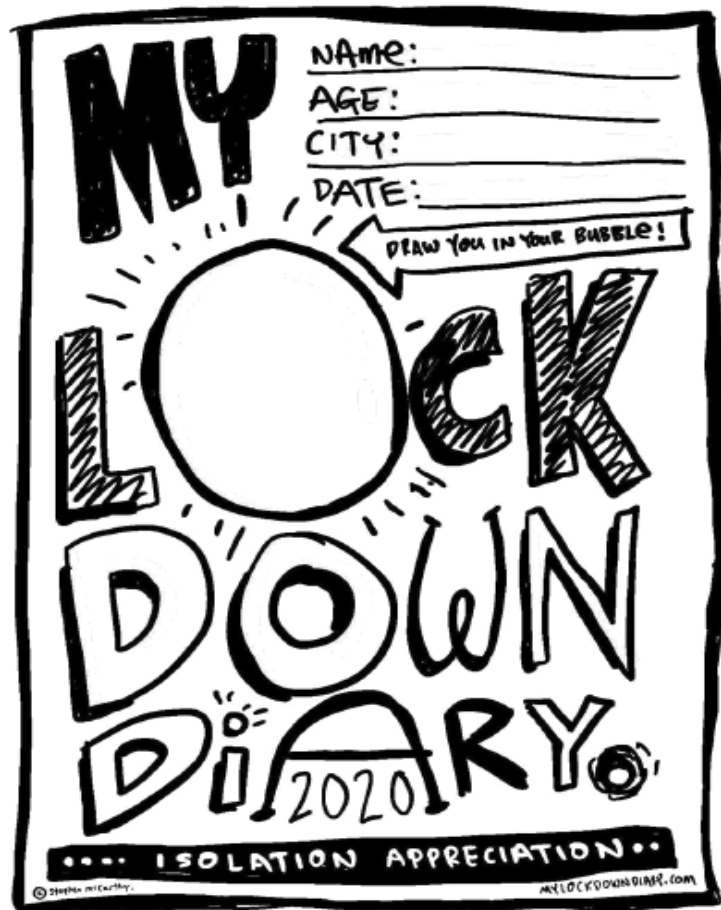I noticed that...   Were there any surprises?

I think this is because...

My Lockdown Diary

Keeping ourselves mentally healthy during Coronavirus is very important. Last week we shared a lovely story called 'Everybody Worries' by Jon Burgerman which helped us to talk about how we were feeling. This week, it would be fantastic if you could begin your own 'Lockdown Diary' to highlight the positive and negative feelings that you might have during this time. We'll also be working on this next week too. Don't forget to talk to a grown-up or a friend if you need some support.

Here are a selection of pages but this available to download online at https://www.cnwl.nhs.uk/news/download-my-lockdown-diary-children
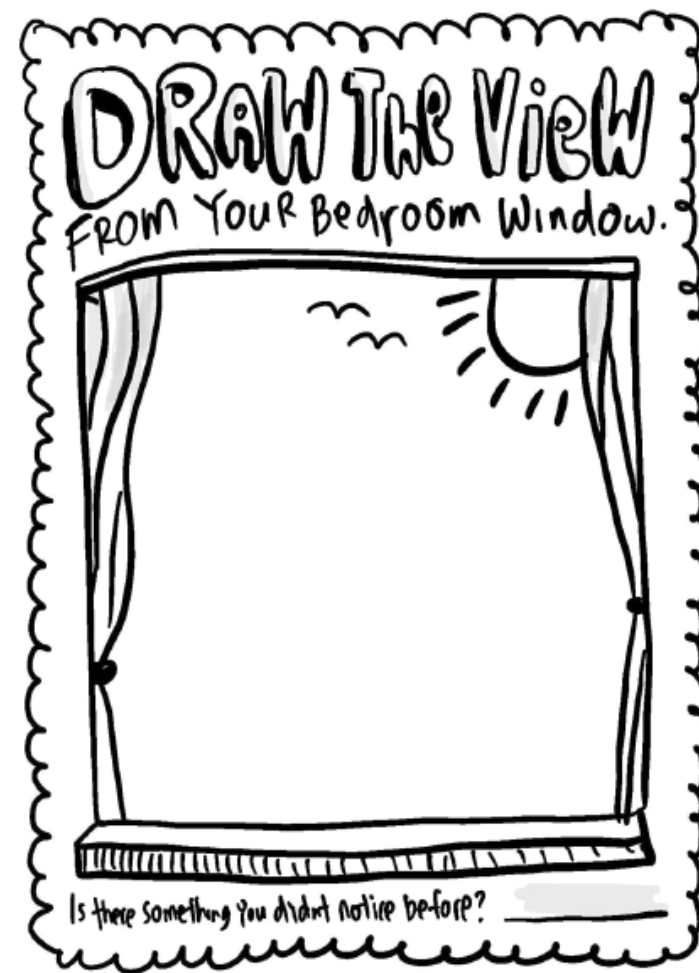
FIVE Awesome things

ABOUT Today

1
2
3
4
5

★ Movie ★
DAY

POPCORN

WATCH A MOVIE / TV SHOW. HOW WAS IT?

TITLE

YOUR REVIEW

What else did today hold?

↘ CIRCLE ONE · ↙
LIKE DISLIKE

I S O L A T I O N

WHAT DO YOU APPRECIATE ABOUT YOUR FAMILY.

A P P R E C I A T O N   D A Y