Video YEAR 3 Home Learning – ROBOTS week 2

You do not need to print off any of the challenges. You can complete them on a piece of paper and take a picture of your work to upload it to Twitter or Facebook

English	Spelling	Maths	Wider Curriculum	Wellbeing
NON-FICTION	**The suffix –ation**	**Calculations**	**History of Robotics**	**PHSE**

English

NON-FICTION

Revisit the poem: Robots in School by Ken Nesbit.

You can find a copy here - https://www.poetry4kids.com/poems/robots-in-the-school/ or see the next page of your home learning pack!

Activity 1:
Design a robot that would be useful in school. Include detailed labels. If you wish you can use the design sheet provided.
- ✓ What is your robot called?
- ✓ What sorts of things does it do?
- ✓ What is your robot made of?

Activity 2:
Write a non-chronological report about your robot.
- ✓ Have you used conjunctions to connect clauses?
- ✓ Have you used a range of sentence starters?
- ✓ Have you used key technical vocabulary?

Activity 3:
Design a persuasive poster advertising your robot.
- ✓ Remember, you want to persuade someone to buy your robot because it will make their life better

Spelling

The suffix –ation

The suffix **–ation** is added to verbs to form nouns. Can you change the verbs on the sheet into nouns?

Eg

Imagine becomes Imagination

Educate becomes Education

Specify becomes Specification

Can you think of any more verbs that you can change into a noun by adding **ation**?

Maths

Calculations

Activity 1:
Mental Calculations
https://www.bbc.co.uk/teach/supermovers/ks2-maths-mental-addition-&-subtraction/zj9pwty

Activity 2:
Formal addition
- ✓ Can you complete the calculations? Don't forget, if the digit is more than 9, we need to carry it over into the next column.

Video link

Activity 3:
Formal Subtraction
- ✓ Can you complete the calculations? Don't forget, if we don't have enough to subtract, we may need to borrow.

Video link

Wider Curriculum

History of Robotics

It's hard to imagine a world without computers. Can you research the history of the computer?

CBBC's Absolute Genius programmes will help you in your task.

Absolute Genius – Alan Turing

https://www.youtube.com/watch?v=vr-Bj1AbQ4k

- ✓ How will you present your research?
- ✓ Can you put your findings onto a timeline?
- ✓ Ask your family member if they remember what computers(if any) they had.

Wellbeing

PHSE

Imagine an Alien Robot has landed and finds planet Earth very peculiar as it is not as it seems because of lockdown.

Draw/write about how wonderful Planet Earth is when functioning properly.

- ✓ What things do you like to look at?
- ✓ What activities do you enjoy doing?
- ✓ What is special about Earth?

Remember to stay positive!

Robots in the School

There were robots by the hundreds
that had taken over school.
They arrived here from the future
when they needed to refuel.

They invaded every classroom
and went clanking through in the halls.
If you looked inside the bathrooms
you'd see robots in the stalls.

They surrounded all the teachers
and propelled them out the door.
Then they headed for the offices
in search of even more.

They ejected the custodian
and Principal as well,
plus the secretary, nurse
and all the other personnel.

They intruded in the lunchroom
and evicted all the cooks.
They expelled our good librarian
and commandeered her books.

Then they came across a small surprise
in section eight-one-one;
just a book of silly poetry
that looked like lots of fun.

When they opened it and read
about a zebra and giraffe,
their connections started sparking
as they all began to laugh.

Next they read a funny poem
where the teacher fell asleep.
All their heads began to rattle
as they bellowed long and deep.

When they read about the lunchroom
and the stuff in Lost and Found
they began shake and wobble,
and they crumpled to the ground.

Then they read a final poem
and their circuits overloaded.
They guffawed so uncontrollably
that all their heads exploded.

Now the school is back to normal.
All the teachers have returned,
and we're happy for the all-important
lesson that we learned.

There is nothing quite so powerful
or mighty as the pen,
and we're memorizing poetry
in case they come again.

— Kenn Nesbitt

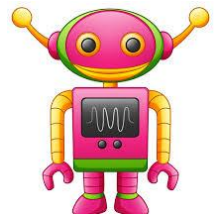# Design a Robot

Draw and Label Your Design

What Materials Will You Choose?

-
-
-

How Will Your Robot Work?

Label and explain these features on your design.

-
-
-
-

Robot – Non-Chronological Report

I can describe how my Robot looks, moves and sounds using adjectives, verbs and conjunctions

What does your robot look like

What is your robot made of?

What does your robot do? What are its functions?

Suffix -ation

-ation

Words with suffix -ation usually tell about an action, a process, or a result.

A suffix is added to the end of a root to form a new word. For example, adding the suffix –ation to the end of the word **prepare** results in a new word **preparation**.

You can change verbs into nouns by adding the suffix –ation.

Example: expect + ation = expectation

I have to meet the expectation.
This is what my teacher will expect.
Through adding the suffix -ation we have changed the verb expect into the noun expectation.

Sometimes the root word changes before the suffix is added.

Example: circle + ation = circulation

Rule 1
When a word ends in a y, change to i before the suffix –ation is added. Usually, a c is also added after the i.
For example:
specify + ation = specification
qualify + ation = qualification
notify + ation = notification
multiply + ation = multiplication

Rule 2
The silent –e at the end of a root word is dropped before adding –ation.
For example:
explore + ation = exploration
declare + ation = declaration
situate + ation = situation
accuse + ation = accusation

twinkl www.twinkl.co.uk

1. Match up the root word in column A with the matching noun ending in -ation in Column B.

Column A		Column B
educate		imagination
identify		education
prepare		preparation
imagine		identification

2. The root words in Column A need the suffix -ation adding to them. Fill the column B.

Column A		Column B
circulate	⟶	
value	⟶	
multiply	⟶	
medicate	⟶	
pollinate	⟶	

3. Make the verb into a noun by adding the suffixes -ation. Think about whether you need to change the root word.

determine	=	
qualify	=	
explore	=	
specify	=	

Written addition of two 3-digit numbers
Maths worksheets from urbrainy.com
UR Brainy

1.
```
  2 3 9
+ 1 5 2
-------
```

2.
```
  2 4 4
+ 2 6 7
-------
```

3.
```
  4 4 7
+ 3 7 4
-------
```

4.
```
  3 3 7
+ 1 8 5
-------
```

5.
```
  4 2 4
+ 2 8 7
-------
```

6.
```
  2 8 4
+ 5 5 7
-------
```

7.
```
  2 4 9
+ 4 7 1
-------
```

8.
```
  1 4 6
+ 3 6 4
-------
```

9.
```
  1 7 5
+ 5 7 9
-------
```

10.
```
  1 8 4
+ 1 9 7
-------
```

11.
```
  1 5 3
+ 4 7 9
-------
```

12.
```
  1 4 8
+ 4 6 4
-------
```

Name:

Written addition of two 3-digit numbers
Maths worksheets from urbrainy.com
UR Brainy

Addition of two 3-digit numbers is usually done on paper, using the following standard method:

```
3 8 9
5 4 6
-----
```

The method is to add the ones (units) first, put the ones in the answer, and 'carry' the ten into the tens column. Then add the tens and continue in the same way into the hundreds. So, the steps are:

Step 1: add the ones (units)

$9 + 6 = 15$

Put the 5 in the ones below the question.

Then place the one ten below the answer in the tens column.

```
3 8 9
5 4 6
-----
    5
  1
```

Step 2: add the tens
8 (tens) + 4 (tens) + 1 (ten) = 13 (tens)
Place the 3 (tens) in the tens column and the 1(hundred) in the hundreds column below the answer.

```
3 8 9
5 4 6
-----
  3 5
1 1
```

Step 3: add the hundreds
3 (hundreds) + 5 (hundreds) + 1 (hundred) = 9 (hundreds)
Place the 9 (hundreds) in the hundreds column.

```
3 8 9
5 4 6
-----
9 3 5
1 1
```

Name:

URBrainy

Use the written method of subtraction to work out the answers to these questions:

1. H T U
    4 8 9
  − 2 5 1
  _____

2. H T U
    6 7 5
  − 1 7 2
  _____

3. H T U
    7 9 5
  − 4 5 0
  _____

4. H T U
    7 5 3
  − 4 1 5
  _____

5. H T U
    4 9 2
  − 2 6 5
  _____

6. H T U
    7 6 5
  − 3 0 8
  _____

7. H T U
    7 2 3
  − 2 4 0
  _____

8. H T U
    8 4 2
  − 5 8 1
  _____

9. H T U
    6 0 5
  − 2 8 3
  _____

Remember to show all your working out.

URBrainy

This method should be used when numbers are too large or too awkward to subtract mentally. Remember: mental methods should be the first resort. However, to get a better idea of this system it is probably best to keep to small, 2-digit subtraction to begin with.

   6 2
 − 3 9
 _____

Step 1:

2 – 9 does not give a positive answer so an adjustment needs to be made.

Adjust 10 from the tens to the ones (units).
This makes the tens one 10 less and makes the ones (units) 10 more.
Cross out the 6 tens and make it 5 tens.

   ⁵6̸ 2
 − 3 9
 _____

Put the extra 10 in the ones, making the 2 ones become 12 ones.

   ⁵6̸ ¹2
 − 3 9
 _____

Step 2: subtract the ones

12 (ones) − 9 (ones) = 3 (ones).

Put the 3 in the ones, in the row below, making sure the ones line up.

   ⁵6̸ ¹2
 − 3 9
 _____
       3

Step 3: subtract the tens

5 (tens) − 3 (tens) = 2 (tens)

Put the 2(tens) in the tens column.

   ⁵6̸ ¹2
 − 3 9
 _____
   2 3

Remember only adjust or 'decompose' when necessary!
Check by adding 23 and 39 to make 62.