Is it a pig or a dog?

This activity teaches Data Representation

Data representation is the method of representing data. Good data representation presents information and ideas clearly and depends on the situation.

This activity is designed to do in pairs, and suits either two siblings working together, or a parent/carer and child.

It is targeted towards primary students, with a younger sibling from F-4, and an elder from years 3-4.

It should take about 15 minutes.

Getting started (read this with your child/sibling):

We’re both going to draw a picture of a pig and a dog.

You should each have a piece of paper with two boxes.

In secret, draw a pig in one of them, a dog in the other, but don’t tell each other which is which! Don’t show each other what you’re drawing either!

To make it even trickier, you’re going to have just 30 seconds per drawing!

Find a timer, and get started.

Ready…. Set……

GO!
Draw a pig and a dog!
Or a dog and a pig?

Student 1 page:

Drawing 1

Drawing 2
Discuss

Pigs and dogs!

Times up!

Compare your pictures.

Swap worksheets and guess which one is a pig, and which one is a dog.

<table>
<thead>
<tr>
<th>Student 1 first pic: ___________</th>
<th>Student 2 / parent first pic: ___________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1 second pic: __________</td>
<td>Student 2 / parent second pic: __________</td>
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</table>

Did you guess right?

Did your picture look like a real life pig?
Probably not! There’s no time to draw a realistic pig in 30 seconds. You would have drawn a representation of a pig and a dog.

There are lots of different ways to represent pigs and dogs depending on the situation!

This is a good way to draw a pig for a cartoon.

This is a good pig symbol for a game

This is a good dog for a cartoon

This is a good dog for a poop warning sign

This is a good dog for a danger sign

This is a watch out for pigs road sign

The way you choose to represent a pig and dog depends on the situation!
Make your own!

- Draw a happy cartoon pig
- Draw a wild pig
- Draw a watch out for dog poo sign
- Draw a sniffer dog
- Draw a guide dog
- Draw a don't feed the pig sign
Want more?

Here are some further activities, online resources, assessment ideas and curriculum references.

**Adapting this activity**
Students can try representing other animals as simply as possible.

For older students you can add additional constraints, like trying to draw a giraffe, or a kangaroo in as few lines as possible.

Or make a challenge to express a different idea! How does a warning sign about giraffes for cars differ from a don’t feed the giraffes sign?

**Keep the conversation going**
- Can you represent other animals so they’re not confused with pigs and dogs? Try drawing a Lion! Or a cat!
- Do you think people from the 1800s would recognise Peppa pig as a pig?
- What’s the difference between what arabic numbers and roman numerals represent? When is it better to use arabic numbers?

**Keep learning**
For students interested in doing more offline data representation activities try DT Laundry:
cmp.ac/laundry

For online coding courses try Blockly Tree:
cmp.ac/blocklytree

**For teachers creating a portfolio of learning or considering this task for assessment**
Ask students to come up with 5 different types of ball/seat/shoe, then draw a picture to represent each one.

**Linking it back to the Australian Curriculum: Digital Technologies**

**Data representation**
Recognise and explore patterns in data and represent data as pictures, symbols and diagrams. (ACTDIK008 - see cmp.ac/datarep).

Refer to aca.edu.au/curriculum for more curriculum information.