



**Digital Technologies @ Home**  
Unplugged activities for students



Teachers

Parents  
and carers

This activity is for: Years F-2

# Messy Drawer - tidy up and reveal secrets

## This activity teaches...

In this activity students count, sort and explore items around the house. In computing, collecting and sorting data is a key concept. In our data-driven world, knowing what data to collect, and finding patterns in it unlocks knowledge.

Representing data and telling a story with it allows scientists to communicate complex ideas simply. Using computers to interpret and represent data allows huge amounts of data to be processed in short amounts of time.

This activity is targeted towards students in years F to 2 and is expected to take up to 60 minutes.



## You will need...

A messy drawer!  
Optional textas and craft materials.

## Getting started (read this with your child):

Every home has a messy drawer. Maybe it's full of knives and forks, pens, bits of string or lego. Let's see what we can find (while we tidy up, hopefully!)

## Step by step

Choose a messy drawer in the house.

Check there's nothing sharp or hazardous (like smelly old socks) before you start with your child.

Tip out the drawer, or remove the items.

Sort the contents of the drawer. How you sort it is up to you and your child. Can you sort by shape? Purpose? Size? Colour?

Record the number of each type on the grid on the next page (there is a finished example on page 5).

Sort a second time using another criteria. And a third time!

Present the results of your favourite way of sorting in two different ways (a graph, drawing, etc.)

Put everything away (tidily, of course.)

# Mystery drawer - tidy up and reveal secrets

Find patterns, sort and count things in a messy drawer.



Students

What's in the drawer?	
My drawer is in the: (eg kitchen)	
It is a place for: (eg knives and forks)	
Round 1: I'm sorting by: (eg item)	
This is what I found: (eg forks, 3)	

Round 2: I'm sorting by:	
This is what I found:	
Round 3: I'm sorting by:	
This is what I found:	

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## Step 2

Choose your favourite way of sorting.

Present your data below, in two different ways. You can use colour, pictures or numbers. (Use another sheet of paper if you like.)

**Step 3: What's the silliest way you could sort the drawer?**

**Step 4: What's an interesting fun fact to share about what's in the drawer?**

# Mystery drawer - tidy up and reveal secrets

Find patterns, sort and count things in a messy drawer.



Parents  
and carers



Teachers

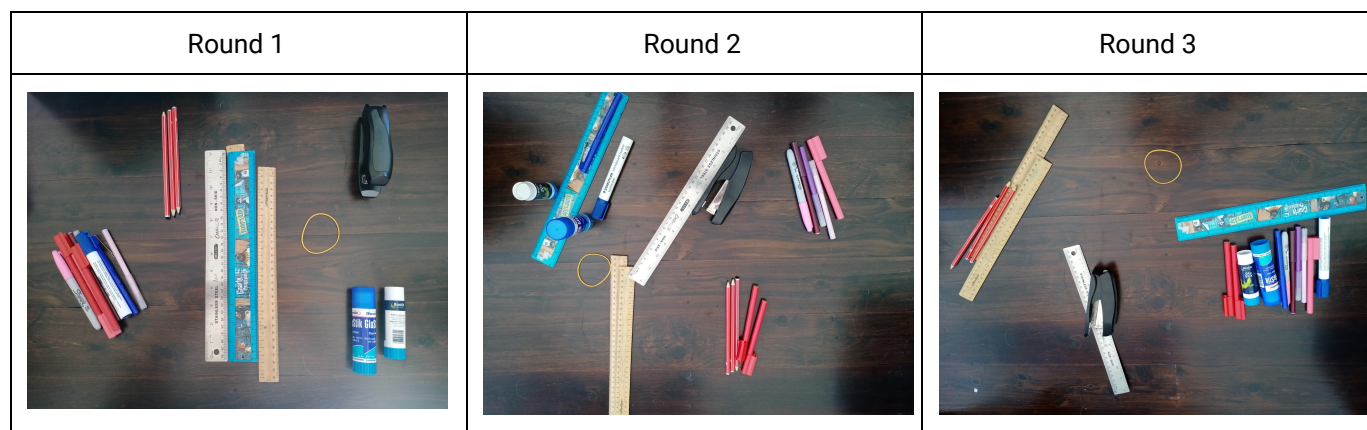
Here's a picture of what was in the stationery drawer. To keep it manageable, we've chosen around 20 items. We've picked three ways to sort items, and recorded them in the worksheet. If students have a phone handy they can take pictures of this activity too.



What's in the drawer?	
My drawer is in the:	<i>Study</i>
It is a place for:	<i>Pens and pencils</i>
Round 1: I'm sorting by:	<i>What they are</i>
I found:	
<i>Pencils</i>	<i>3</i>
<i>Pens</i>	<i>9</i>
<i>Rubber bands</i>	<i>1</i>

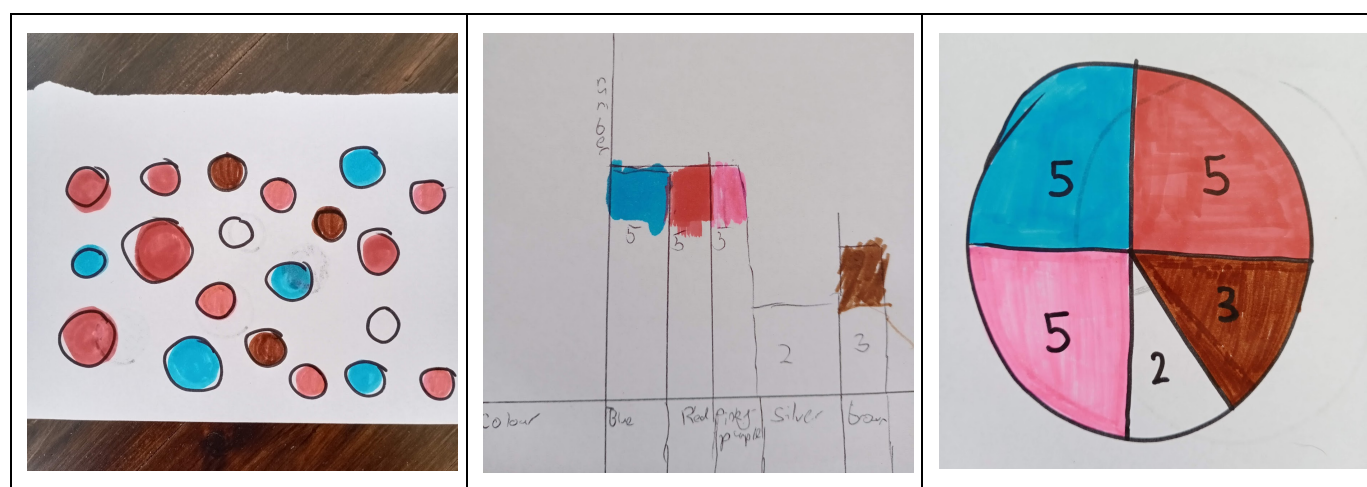
<i>Rulers</i>	<i>4</i>
<i>Glue sticks</i>	<i>2</i>
<i>Stapler</i>	<i>1</i>
Round 2: I'm sorting by:	<i>Colour</i>
I found:	
<i>Blue things</i>	<i>5</i>
<i>Red things</i>	<i>5</i>
<i>Pinky purple things</i>	<i>5</i>
<i>Things with silver on them</i>	<i>2</i>
<i>Brown things</i>	<i>3</i>
Round 3: I'm sorting by:	<i>What they are made of</i>
I found:	
<i>Plastic things</i>	<i>12</i>
<i>Wooden things</i>	<i>5</i>
<i>Metal things</i>	<i>2</i>
<i>Rubber things</i>	<i>1</i>

**Images of each way of sorting the drawer contents.**



**Step 2**

Choose your favourite way of sorting. Show your data below, in two different ways. (Students might use tally marks, numbers, pictures, blocks of colours or other ways to present their findings.) Here are some examples.



## Want more?

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



### Adapting this activity

Older students could explore presenting their work in histograms or pie charts.

Older students could work with larger sets of items. Students could report back and compare results with other students: does everyone have the same things in their stationery drawer or cutlery drawer?

In the classroom, you could adapt this activity to explore items around the classroom, the library, or even explore the school grounds and collect leaves, twigs etc in various locations.

### Keep learning

Explore ways that we can represent information in our unplugged drawing activity: [cmp.ac/pig-dog](http://cmp.ac/pig-dog)

Investigate creating sets of instructions in a fun unplugged activity with our favourite friend, the Wombot: [cmp.ac/wombot](http://cmp.ac/wombot)

An interesting reflection question is to ask what the sorting activity taught students about the drawer contents, which they might not have otherwise realised. (An example is that in the third example above we can see that most of our stationery is made of plastic.)

### For teachers creating a portfolio of learning or considering this task for assessment

Ask students to submit their worksheets from this activity, with photos if possible.

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



Recognise and explore patterns in data and represent data as pictures, symbols and diagrams (ACTDIK002) [cmp.ac/datarep](http://cmp.ac/datarep)

Collect, explore and sort data, and use digital systems to present the data creatively (ACTDIP003) [cmp.ac/dataint](http://cmp.ac/dataint)

Refer to [aca.edu.au/curriculum](http://aca.edu.au/curriculum) for more curriculum information.