

**Materials**

Mini packets of M & Ms

(1 per child)

Recording paper

Grid paper

Markers

Rulers

Other objects with multiple attributes

**Statistics and Probability**

**Number and Algebra**

**Years R - 2**

**Task:**

Predict and record what you think is in your M & Ms packet.

DON’T OPEN IT!

Compare your predictions to a partner or group. What do you notice?

Open your packet. What did you find out?

Represent your data. Record what you found out.

Collect class data for all the M & Ms packets. What did you find out?

(For working with larger numbers substitute M & Ms for other objects. For more challenging data collection choose objects with multiple attributes.)

**Questions and prompts**

What do you think is inside your packet?

How many do you think are in your packet? Explain why you think so?

What do you think they will look like? – Draw what you predict is in your packet.

Is your prediction the same as your partner? Why or Why not?

How can you represent your findings/data?

Can you represent your data another way?

What did you find out about the M & Ms in your packet?

* Most, least, equal, more than, less than, same as, altogether

Explain why you think your data is different to others?

What would your data look like if you combined your packet with your partners packet?

How can we collect and record the class data?

**Mathematical ideas**

Important questions can be answered by collecting data.

There are different ways of collecting data.

Data can be sorted in different ways.

We can classify objects and events according to the data we observe.

We can represent the same information in different ways.

We can find patterns in data.

We can use data to make predictions.

**Australian Curriculum**

**Proficiency Strands**

* **understanding** includes connecting names, numerals and quantities, and partitioning numbers in various ways
* **fluency** includes readily counting number in sequences forwards and backwards, using the language of chance
* **problem-solving** includes using materials to model authentic problems using familiar counting sequences to solve unfamiliar problems and discussing the reasonableness of the answer
* **reasoning** includes explaining comparisons of quantities, justifying representations of data, creating and interpreting simple representations of data.

**Relevant content descriptions**

Foundation - Number & Algebra

* Compare, order and make correspondences between collections, initially to 20, and explain reasoning [(ACMNA289)](http://www.scootle.edu.au/ec/search?accContentId=ACMNA289)

Foundation - Statistics & Probability

* Answer yes/no questions to collect information and make simple inferences  [(ACMSP011](http://www.scootle.edu.au/ec/search?accContentId=ACMSP011))

Year 1- Statistics & Probability

* Choose simple questions and gather responses and make simple inferences [(ACMSP262](http://www.scootle.edu.au/ec/search?accContentId=ACMSP262))
* Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays[(ACMSP263](http://www.scootle.edu.au/ec/search?accContentId=ACMSP263))

Year 2 - Statistics & Probability

* Gather data relevant to the question [(ACMSP048](http://www.scootle.edu.au/ec/search?accContentId=ACMSP048))
* Collect, check and classify data [(ACMSP049](http://www.scootle.edu.au/ec/search?accContentId=ACMSP049))
* Create displays of data using lists, table and picture graphs and interpret them [(ACMSP050](http://www.scootle.edu.au/ec/search?accContentId=ACMSP050))

**Numeracy Progressions**

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| **Interpreting and Representing Data IRD1** |
| **One-to-one data displays*** displays information using real objects or photographs
* responds to questions about the information in one-to-one data displays
* interprets general observations made about data represented in one-to-one data displays
* makes comparisons from categorical data displays using relative heights from a common baseline
* draws reasonable conclusions from one-to-one data displays
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**Learning intention/s – be specific and write your own**