



DRAGON LESSON: DRAGON DOCUMENTARY

CURRICULUM LEVEL 2

ACHIEVEMENT OBJECTIVE

S2-1: Conduct investigations, using the statistical enquiry cycle: posing and answering questions; gathering, sorting, and displaying category and whole number data; communicating findings based on the data.

PURPOSE

Investigating multivariate data using a set of dragon cards. Sorting and organising a set of dragon cards uncovers information about the set.

DESCRIPTION

Students sort and organise data to uncover information about their set of dragon cards. Through the investigation students discover information about their dragons. By sharing their findings students better understand how statistical results can vary between different sets of dragons.

EQUIPMENT

- One pack of Dragonistics Data Cards (about 24 cards per group)
- A way for students to record their results

ACTIVITY

Students should be familiar with the dragon cards and the data they contain. Remind them of the four different dangerous breath types and their symbols.

STORY

Dr Nic is making a documentary about dragons. She asked you to find out about the dragons on a small island. Each group has a different island.

Your group needs to find out interesting information about the dragons from your island. To start, look at whether the red dragons or the green dragons are the most common. After that you decide what to find out about your dragons.

You will need to record what you find *with* evidence to support your findings. The evidence could be in the form of numbers, tables or graphs. At the end of your investigation you will be sharing your findings with the class.

Dragon Lesson: Dragon Documentary



ISLAND INVESTIGATIONS

Organise the students into groups of three. Mixed ability groups work well. We suggest assigning three roles: Dragon Minder, Person Minder and Record Minder. The Dragon Minder is responsible for the dragon cards and getting instructions. The Person Minder ensures everyone participates in the investigation and sharing. The Record Minder records the findings and evidence.

Leave the groups to investigate their dragons. At Curriculum Level 2 students should be posing their own questions to investigate about their group of dragons. For example, I wonder if there are more Dangerous dragons or more Friendly dragons on our island.

Let the groups decide what to investigate. Generally category data is easier to analyse than the whole-number data. Where a group is having trouble with a more difficult attribute, suggest they start with something easier.

Encourage groups to record evidence rather than just 'answers'. For example, record how many of each behaviour not just that more are Dangerous dragons.

Groups can provide evidence in different ways. A group might write the number of dragons with each behaviour in a list or table, or they might form a physical table or graph and take a picture.

It is better for students to form graphs using the cards and take a picture than to spend time neatly drawing graphs using a ruler.

REPORTING FINDINGS

Leave time at the end of the lesson for the groups to report their findings. You might ask groups to report their three most interesting findings.

It is useful to make connections between the findings of different groups. Useful questions to ask are "Do you think other groups found the same as you?" and "How are your results the same as another group? How are they different?"

You can compare groups directly where they have the same or a different result or generalise across all results.

Where to next? More ideas at [CreativeMaths.net](https://www.creativemaths.net) – and do give us feedback as to what worked for you.

You can order Dragon Cards and download other free lessons at [CreativeMaths.net](https://www.creativemaths.net)

27 September 2018