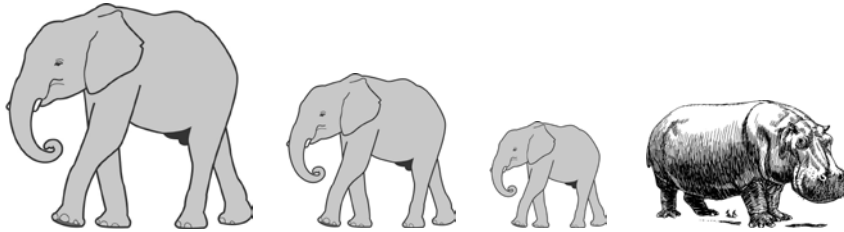


# Critical Thinking – Student Activity

## All Elephants are Grey – Discussion



- Statement 1 “All elephants are grey”
- Statement 2 “That animal on the right is grey. It must be an elephant!”

This expansion is a simple logical extension of the first statement ..... but, is it correct? Discuss this with your group and write what you think below.

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As scientists we have to reflect on what we know and decide if Statement 2 agrees with what we have already observed and read about. Is there anything we need to know or research before we decide if Statement 2 is true?

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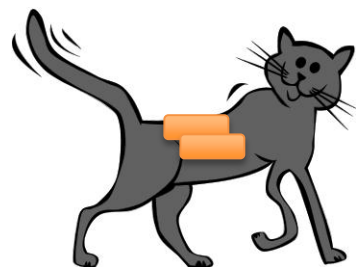
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**A good scientist does not make a statement based on only one observation then design an experiment**

## Hot, Buttered Cats – Discussion

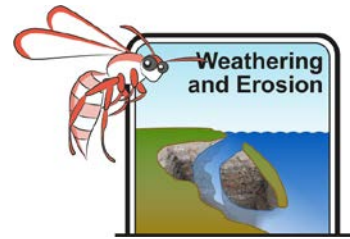
- Statement 1 Cats always fall on their feet
- Statement 2 Buttered toast always falls buttered side down.



Does this mean that if you strap buttered toast onto the back of a cat and push off a high ledge, the cat will not fall?

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## Critical Thinking – Student Activity

Should scientists try this experiment to see what happens? Explain your answer.

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Discuss how you could test the idea put forward in statement 2 and design an experiment to test this idea.

Use these headings

**AIM** (What are you testing?) \_\_\_\_\_

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**Materials** (What equipment do you need?) \_\_\_\_\_

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**Method** (What will you do?) \_\_\_\_\_

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**Observations** (What could you see, feel, smell, and hear and what measurable data could you collect?)

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**Conclusion** (What idea did the data collected support)

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