Lesson Number: 10A – Make a Spark

Year Level: P/K-3

5Es: Explain

Curriculum Links: English, Science
**Lesson Number:** 10A  
**Theme:** During a Storm

In this story the key message is that it is best to stay inside during severe weather. Tucka is standing under a tree and refuses to cross the road to the hardware store. It’s raining and he may get wet. Bob stresses that it is dangerous to shelter under trees during severe weather, but Tucka isn’t convinced. He is perfectly safe where he is. Bob points out that lightning is likely to strike trees as they are so tall, and if Tucka is underneath one when that happens, he may be hurt. Tucka realises the possible danger, and agrees to join Bob on the porch of the hardware store.

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**What students will ‘Know and Do’:**

Students will understand what lightning is and be able to participate in the experiment to show the effects of lightning strikes.

1. View the Li’L Safety Club Natural Disasters advertisement - During a Storm
2. As a class, discuss the key messages of the advertisement (listed above).
3. Introduce the term ‘lightning’ and view the YouTube video/s of a lightning strike. Refer to Background Information: Lightning.
4. Ask students to say what they know about lightning, for example, what it looks like, sounds like. Write these responses on the board or large sheet of paper. These assumptions are to be tested.
5. As a class, the student will conduct an experiment to discover how simple electricity is formed. Refer to the instructions on Weather Wiz Kids: [www.weatherwizkids.com/experiments-lightning.htm](http://www.weatherwizkids.com/experiments-lightning.htm). Remember that safety in the classroom is paramount and teachers should practice the experiment before trying it with their students.
6. Students are asked to write up the experiment and explain why the reaction happened. They should also find out some facts about electricity and lightning and test these facts against the ideas they had at the beginning of the lesson.
7. As a class, discuss the dangers of lightning during a storm. List on the board safety tips that students should enact during an emergency (see SES Tasmania: Lightning Action Guide in ‘Useful resources’ for assistance).

**Useful resources:**

- Lightning Strikes! [www.youtube.com/watch?v=Qu2o00X2ZA0&feature=related](http://www.youtube.com/watch?v=Qu2o00X2ZA0&feature=related)
- Man Struck By Lightning [www.youtube.com/watch?v=pCTpE0PX_mA&feature=related](http://www.youtube.com/watch?v=pCTpE0PX_mA&feature=related)
- Kids’ lightning information and safety: [www.kidslightning.info](http://www.kidslightning.info)
- Teaching Earth and Atmospheric Science with the Kids Crossing website, A Guide for Educators, Colorado: [http://eo.ucar.edu/webweather/lightning.html](http://eo.ucar.edu/webweather/lightning.html)
1. Refer to the instructions on *Weather Wiz Kids* about conducting electricity/lightning. Follow the instructions of your teacher in conducting the experiment.

2. Write up the experiment by answering the following questions:

**WHAT IS LIGHTNING?**

**MATERIALS:**

- __________________________
- __________________________

**PROCESS:**

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

**EXPLANATION:**

Q. What did the lightning bolt say to the other lightning bolt?  
A. You’re shocking!