



## 5. Weather and Space

Explore a folktale about thunder and lightning, and learn about weather lore. Explore the Earth, Sun, Moon and stars. Learn about staying safe in the sun and investigate why we need sun cream. Look at the Sahara Desert, and how animals are adapted to live there.

### Notes

Teachers could organise a field trip to the Birr Castle Science Centre or the Armagh Observatory & Planetarium.

### Materials

- Globe
- Torch
- Sun cream
- Dark-coloured card
- Thermometer

### Books

- *The Solar System (Usborne Beginners)* by Emily Bone, Terry Pastor, et al.
  - National Geographic *Little Kids First Big Book of Space* by Catherine D. Hughes, David Aguilar, et al.
- National Geographic Readers:**
- L2: Night Sky

### Useful Links

#### History

1. [www.almanac.com/content/weather-sayings-and-their-meanings](http://www.almanac.com/content/weather-sayings-and-their-meanings)
2. [www.rte.ie/weather](http://www.rte.ie/weather)

#### Geography

1. [www.armaghplanet.com](http://www.armaghplanet.com)
2. [www.dkfindout.com/uk/space](http://www.dkfindout.com/uk/space)
3. [www.weatherforkids.org](http://www.weatherforkids.org)

YouTube: *Apollo 11 – The First Moon Walk* by National Geographic Kids

YouTube: *The Best Photos of Earth Taken from Space | Chris Hadfield* by Big Think

#### Science

[www.activewild.com/sahara-desert-facts-for-kids](http://www.activewild.com/sahara-desert-facts-for-kids)

### Key Vocabulary

History		Geography		Science	
origins	seagulls	solar system	the Moon	UV rays	thermometer
thunder	ancestors	planet	the Plough	burning	Sahara Desert
lightning	predicted	Earth	Orion	sun cream	temperature
ram	weather sayings	spins	constellations	protect	
ladybirds		the Sun	astronauts	sunglasses	
		seasons	rocket	shade	
		stars			

### Integration

**Language:** A digital poster *Extreme Environments* is available as part of Folens *Starlight* oral language programme for 2nd Class (Unit 12).

**Visual Arts:** Create a night sky constellations display.

**Music:** Listen and respond to the storm from Vivaldi's *Four Seasons* or Chris Hadfield singing 'Space Oddity'.

### Home/Parental Involvement

Watch the weather forecast.

Discuss sun safety and model safe practices in the sun.

Help your child to identify star constellations in the sky.

## Theme Overview

**D** indicates an *Explorers* Digital Resource on FolensOnline.

**P** indicates an *Explorers* Print Resource in the *Explorers* Student Book.

	LESSON 1	LESSON 2	LESSON 3
HISTORY	<p><b>Focus: Chronology of a story</b></p> <p><b>P The Origins of Thunder and Lightning p. 36</b> Read the folktale about Thunder and Lightning. Answer the questions. Discuss experiences of actual thunder storms and compare with the folktale description.</p> <p><b>D The Origins of Thunder and Lightning: Questions</b> Click the numbered buttons to answer questions about the folktale.</p>	<p><b>Focus: Predicting the weather long ago</b></p> <p><b>P What do old sayings tell us? p. 37</b> Read weather sayings and discuss possible meanings. Discuss their accuracy. Match meanings to sayings. Children ask an older person for any weather lore they know.</p>	<p><b>Focus: Weather prediction today</b></p> <p>Discuss weather lore collected from older people at home. Try to work out their meanings. Choose a saying, write its meaning and illustrate it. Discuss how we know what the weather will be like today. Watch the RTÉ weather forecast (see <i>Useful Links</i>).</p>
	<p><b>Focus: How the Sun gives us day and night</b></p> <p><b>P Explore: Our Solar System p. 38</b> Show a globe. Highlight the blue areas. Discuss the significance of water to life on Earth. Read the passage <i>The Earth</i>. Use a torch (as the Sun) and a globe to show that where the Sun shines it is daytime, and on the opposite side of Earth it is night-time. Complete the cloze activity to review understanding.</p>	<p><b>Focus: The Sun and the stars</b></p> <p>Discuss what children know about the Sun and stars.</p> <p><b>P Explore: Our Solar System pp. 38–39</b> Read the passage <i>The Sun</i>. Answer the questions. Then read <i>Stars</i>. Decide whether each statement is true or false.</p> <p><b>D Constellations: Flashcards</b> Explore the constellations. Discuss what each one looks like, before flipping the flashcard to learn more.</p>	<p><b>Focus: Earth's Moon</b></p> <p>Discuss what children know about Earth's Moon.</p> <p><b>P Explore: Our Solar System p. 39</b> Read <i>Earth's Moon</i>. Watch <i>Apollo 11 – The First Moon Walk</i> (see <i>Useful Links</i>). Research and create a display, Report or presentation on the first Moon landing. Draw and name a space rocket to take your class to the Moon.</p>
SCIENCE	<p><b>Focus: How does sun cream work?</b></p> <p>Discuss how the Sun gives us the heat and light we need.</p> <p><b>P How do I stay safe in the sun? p. 40</b> Read about staying safe in the sun.</p> <p><b>P Investigate: Why do I need sun cream? p. 40</b> Follow the steps to investigate how sun cream blocks UV rays. Record what happens.</p>	<p><b>Focus: Staying safe in the sun</b></p> <p><b>D Sun Safety: Sort</b> Look at each picture. Decide whether or not it shows sun safety. Plan and design a poster promoting sun safety. Use a thermometer to take the temperature in the classroom in direct sunlight and in the shade. Compare findings.</p>	<p><b>Focus: The Sahara Desert</b></p> <p><b>P How hot is the Sahara Desert? p. 41</b> Investigate and record the average temperature in the Sahara Desert. Record the temperature in the classroom. Compare the two. Discuss examples of how animals adapt to their environment. Match each animal to its descriptions. Discuss: How do they remain cool? How do people stay cool?</p>

Curriculum Information	
<b>History</b>	
Strand and Strand Unit	Skills
<p><b>Story: Stories</b></p> <ul style="list-style-type: none"> <li>• Listen to, discuss, retell and record a range of myths and legends from different cultural, ethnic and religious backgrounds in Ireland and other countries</li> <li>• Distinguish between fictional accounts in stories, myths and legends and real people and events in the past</li> <li>• Discuss chronology of events in a story</li> <li>• Discuss the actions and feelings of characters</li> </ul>	<p><b>Working as a historian</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Time and chronology</li> <li><input checked="" type="checkbox"/> Change and continuity</li> <li><input checked="" type="checkbox"/> Cause and effect</li> <li><input checked="" type="checkbox"/> Using evidence</li> <li><input checked="" type="checkbox"/> Synthesis and communication</li> <li><input checked="" type="checkbox"/> Empathy</li> </ul>
<b>Geography</b>	
Strand and Strand Unit	Skills
<p><b>Natural environments: Planet Earth in space</b></p> <ul style="list-style-type: none"> <li>• Recognise the Sun as a source of heat and light</li> <li>• Identify the Sun, the Moon, stars, day and night</li> <li>• Develop familiarity with the spherical nature of the Earth</li> </ul>	<p><b>A sense of place and space</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> A sense of place</li> <li><input checked="" type="checkbox"/> A sense of space</li> </ul> <p><b>Maps, globes and graphical skills</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Using pictures, maps and globes</li> </ul> <p><b>Geographical investigation skills</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Questioning</li> <li><input checked="" type="checkbox"/> Observing</li> <li><input type="checkbox"/> Predicting</li> <li><input checked="" type="checkbox"/> Investigating and experimenting</li> <li><input type="checkbox"/> Estimating and measuring</li> <li><input checked="" type="checkbox"/> Analysing</li> <li><input checked="" type="checkbox"/> Recording and communicating</li> </ul>
<b>Science</b>	
Strand and Strand Unit	Skills
<p><b>Energy and forces: Light</b></p> <ul style="list-style-type: none"> <li>• Recognise that the Sun gives us heat and light, without which we could not survive</li> <li>• Become aware of the dangers of looking directly at the Sun</li> <li>• Recognise that light comes from different sources</li> </ul> <p><b>Energy and forces: Heat</b></p> <ul style="list-style-type: none"> <li>• Measure and compare temperatures in different places in the classroom, school and environment</li> </ul>	<p><b>Working scientifically</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Questioning</li> <li><input checked="" type="checkbox"/> Observing</li> <li><input type="checkbox"/> Predicting</li> <li><input checked="" type="checkbox"/> Investigating and experimenting</li> <li><input checked="" type="checkbox"/> Estimating and measuring</li> <li><input checked="" type="checkbox"/> Analysing</li> <li><input checked="" type="checkbox"/> Recording and communicating</li> </ul> <p><b>Designing and making</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Exploring</li> <li><input type="checkbox"/> Planning</li> <li><input checked="" type="checkbox"/> Making</li> <li><input type="checkbox"/> Evaluating</li> </ul>