

# Preparation Guide

## Level 2 Module 3

### Sky

**Materials:** This section lists the quantity of each material necessary for the lesson. Lesson materials may be from a *PhD Science® TEKS Edition* materials kit or they may be school supplied. In addition to the listed materials, teachers should have access to the following common classroom items: sticky notes, chart paper, pencils, a whiteboard, and markers. This section also lists items in the current lesson that are reused in future lessons. Note that items found in a typical elementary classroom (e.g., glue, tape, scissors) are not listed for reuse.

**Resources:** This section lists module resources (from Appendix A in the Teacher Edition) and core texts used in the lesson. Classrooms also need daily access to the module’s Teacher Edition, Science Logbooks, and, if applicable, PhD Projected. A symbol (🖥️) identifies resources that appear in PhD Projected.

**Preparation:** This section identifies preparation teachers should complete before the lesson, including media teachers must cue before the lesson and activities that require setup. This section also describes advance preparation for upcoming lessons. For example, if teachers need to prepare 1 day in advance for an activity in Lesson 11, an advance preparation note appears in the Preparation section for Lesson 10. A symbol (📅) identifies lessons with advance preparation notes.


## Advance Materials Preparation

An activity in this module requires advance preparation. A version of this list appears in the Module Overview of the Teacher Edition. The expanded version in this guide identifies all lessons for which preparation may take longer than a planning period. A symbol (†) identifies preparation that can be done earlier than the suggested time.




Lesson	Time in Advance	Investigation	Description
4	Varies†	Sun Observations	Plan to conduct Lesson 4 in two parts. Conduct the first part of the lesson in the morning and the second part of the lesson several hours later, in the afternoon.

# Lesson Preparation

## Lesson 1

<b>Materials</b>	<b>Kit Items</b>	<b>School Supplied Items</b>
	<input type="checkbox"/> Compasses (12)	<input type="checkbox"/> Marker, permanent, black (1)
	<b>Item Reuse</b>	
	<input type="checkbox"/> Lesson 5 requires 1 of the compasses.	
<b>Resources</b>	<input type="checkbox"/> Lesson 1 Resource: Compass Preparation Instructions	
<b>Preparation</b>	<input type="checkbox"/> Cue hiker looking at compass video: <a href="http://phdsci.link/1809">http://phdsci.link/1809</a> .  <input type="checkbox"/> Prepare compasses. (See Lesson 1 Resource.) <input type="checkbox"/> Identify a large, open outdoor space to take students to in Lesson 1 and Lesson 2. Choose an outdoor space that contains objects that students can easily navigate to and that align clearly with the cardinal directions. Objects may include trees, benches, and playground equipment. Be sure the outdoor space can accommodate a class discussion. If an outdoor space is not available or the weather is unfavorable, consider performing the Lesson 1 activities indoors. Identify an indoor space that can accommodate a class discussion, and choose or place objects in the space that align clearly with the cardinal directions.	


## Lesson 2

<b>Materials</b>	<b>Kit Items</b>	<b>School Supplied Items</b>
	<input type="checkbox"/> Sticky note arrows (2)	<input type="checkbox"/> Globe (1, optional)
<b>Resources</b>	<input type="checkbox"/> Lesson 2 Resource A: Polynesia and Surrounding Landforms Map  <input type="checkbox"/> Lesson 2 Resource B: Polynesia Map  <input type="checkbox"/> Lesson 2 Resource C: Ocean Photograph  <input type="checkbox"/> <i>Island Below the Star</i> (Rumford 2022)	
<b>Preparation</b>	<input type="checkbox"/> Identify a large, open outdoor space to take students to in Lesson 1 and Lesson 2. Choose an outdoor space that contains objects that students can easily navigate to and that align clearly with the cardinal directions. Objects may include trees, benches, and playground equipment. Be sure the outdoor space can accommodate a class discussion. If the outdoor space identified for Lesson 1 is not available or the weather is unfavorable, consider having students make Lesson 2 observations through a classroom window.	


## Lesson 3

<b>Materials</b>	<b>Kit Items</b> None	<b>School Supplied Items</b> <input type="checkbox"/> Globe (1, optional) <input type="checkbox"/> Scissors (1)
<b>Resources</b>	<input type="checkbox"/> Lesson 3 Resource: Sky Cards <input type="checkbox"/> <i>Island Below the Star</i> (Rumford 2022)	
<b>Preparation</b>	<input type="checkbox"/> Prepare sky cards. (See Lesson 3 Resource.)	





## Lesson 4

<b>Materials</b>	<b>Kit Items</b> <input type="checkbox"/> Solar viewers (24) <input type="checkbox"/> Sunglasses (24)	<b>School Supplied Items</b> None
<b>Resources</b>	<input type="checkbox"/> Lesson 4 Resource A: Sky Observation Photographs (optional) <input type="checkbox"/> Lesson 4 Resource B: Sun Observation Procedure Sheet	
<b>Preparation</b>	<input type="checkbox"/> Plan to conduct Lesson 4 in two parts. Conduct the beginning of the lesson through the Observe the Morning Sky activity in the morning, when the Sun is low in the sky and to the east. Continue the lesson with the Observe the Afternoon Sky activity in the afternoon, when the Sun appears in a noticeably different location in the sky. <input type="checkbox"/> Identify a large, open outdoor space to take students to during Lessons 4 and 5. The space should face south, have a direct view of the Sun in the morning and afternoon, and contain ground-based landmarks, such as trees, benches, and playground equipment. If an outdoor space is not available or if the weather is unfavorable, have students observe the photographs in Lesson 4 Resource A instead of having students directly observe the Sun. <input type="checkbox"/> Cue hiker video: <a href="http://phdsci.link/1828">http://phdsci.link/1828</a> . 	




## Lesson 5

<b>Materials</b>	<b>Kit Items</b> <input type="checkbox"/> Compass (1) <input type="checkbox"/> Solar viewers (24, optional) <input type="checkbox"/> Sunglasses (24, optional)	<b>School Supplied Items</b> <input type="checkbox"/> Scissors (1)
	<b>Item Reuse</b> <input type="checkbox"/> Lesson 8 requires the prepared class Sun observations model.	
<b>Resources</b>	<input type="checkbox"/> Lesson 5 Resource A: Sky Observation Photographs with Compasses (optional) <input type="checkbox"/> Lesson 5 Resource B: Sun Observation Cards <input type="checkbox"/> Lesson 5 Resource C: Using Photographs and Videos from a Planetarium Program <input type="checkbox"/> Lesson 5 Resource D: July Sun Observation Videos 	
<b>Preparation</b>	<input type="checkbox"/> Identify a large, open outdoor space to take students to during Lessons 4 and 5. The space should face south, have a direct view of the Sun in the morning and afternoon, and contain ground-based landmarks, such as trees, benches, and playground equipment. If the outdoor space identified for Lesson 4 is not available or if the weather is unfavorable, have students observe the photographs in Lesson 5 Resource A instead of having students directly observe the Sun. <input type="checkbox"/> Prepare Sun observation cards. (See Lesson 5 Resource B.) <input type="checkbox"/> Prepare to use photographs and videos from Stellarium®. (See Lesson 5 Resource C.) <input type="checkbox"/> Cue July Sun observation video for the appropriate location. (See Lesson 5 Resource D.)	


## Lesson 6

<b>Materials</b>	<b>Kit Items</b> None	<b>School Supplied Items</b> <input type="checkbox"/> Computers or tablets with internet access (6–12) <input type="checkbox"/> Pocket chart (1)
	<b>Module 1 Kit</b> <input type="checkbox"/> Sentence strips (3)	
	<b>Item Reuse</b> <input type="checkbox"/> Lesson 19 requires the computers or tablets.	
<b>Preparation</b>	<b>Resources</b> <input type="checkbox"/> Lesson 5 Resource D: July Sun Observation Videos  <input type="checkbox"/> Lesson 6 Resource: Sun Observation Station Videos 	
	<input type="checkbox"/> Cue hiker video: <a href="http://phdsci.link/1828">http://phdsci.link/1828</a> .  <input type="checkbox"/> Cue July Sun observation video for the appropriate location. (See Lesson 5 Resource D.)  <input type="checkbox"/> Set up Sun observation stations. Cue videos for the appropriate location at stations. (See Lesson 6 Resource.) For most class sizes, set up two of each station. If possible, set up two computers or tablets at each station so students can watch the Sun’s path more closely. Adjust group size according to computer and tablet availability. <input type="checkbox"/> Prepare a student statements chart by creating two columns on a sheet of chart paper. Label the columns Student A and Student B. Write the following in the Student A column: I think the hiker is facing east and watching the Sun rise. Then write the following in the Student B column: I think the hiker is facing east because we observed the Sun rise in the east each day.	




## Lesson 7

<b>Materials</b>	<b>Kit Items</b> None	<b>School Supplied Items</b> None
<b>Resources</b>	<input type="checkbox"/> Lesson 7 Resource A: Polynesian Navigation Storyboard  <input type="checkbox"/> Lesson 7 Resource B: Conceptual Checkpoint 	
<b>Preparation</b>	<input type="checkbox"/> Cue modern boat video: <a href="http://phdsci.link/1831">http://phdsci.link/1831</a> .  <input type="checkbox"/> Prepare to distribute a copy of Lesson 7 Resource B to each student.	


## Lesson 8

<b>Materials</b>	<b>Kit Items</b> None	<b>School Supplied Items</b> <input type="checkbox"/> Paper, printer, 8.5" × 11" (8 sheets) <input type="checkbox"/> Tape (partial roll)
	<b>Prepared Items from Previous Lessons</b> <input type="checkbox"/> Class Sun observations model from Lesson 5 (1)	
<b>Resources</b>	<input type="checkbox"/> Lesson 8 Resource: Tupaia’s Drawing  <input type="checkbox"/> <i>Island Below the Star</i> (Rumford 2022)	
<b>Preparation</b>	<input type="checkbox"/> Before the lesson, label each wall of the classroom with a cardinal direction. The labels do not need to correspond to the actual cardinal directions, but they should appear in the correct clockwise order: north, east, south, and west. <input type="checkbox"/> Prepare a sheet of paper labeled Hawaii, a sheet of paper labeled Marquesas Islands, a sheet of paper labeled Sunrise, and a sheet of paper labeled Sunset to tape to the walls during Lesson 8.	

## Lesson 9

<b>Materials</b>	<b>Kit Items</b> None	<b>School Supplied Items</b> <input type="checkbox"/> Scissors (1) <input type="checkbox"/> Tape (partial roll)
	<b>Resources</b> <input type="checkbox"/> Lesson 9 Resource A: Science Challenge Rubric <input type="checkbox"/> Lesson 9 Resource B: Farmer Photograph  <input type="checkbox"/> Lesson 9 Resource C: June 2020 Farmer’s Observations  <input type="checkbox"/> Lesson 9 Resource D: Thermometer Illustration (optional) <input type="checkbox"/> Lesson 9 Resource E: Farmer’s Observations Chart	
<b>Preparation</b>	<input type="checkbox"/> Prepare farmer’s observations charts. (See Lesson 9 Resource E.) <input type="checkbox"/> Cue strawberry plant growth video: <a href="http://phdsci.link/1840">http://phdsci.link/1840</a> . 	

## Lesson 10



<b>Materials</b>	<b>Kit Items</b> None  <b>Module 1 Kit</b> <input type="checkbox"/> Sentence strip (1)	<b>School Supplied Items</b> <input type="checkbox"/> Scissors (1) <input type="checkbox"/> Tape (partial roll)
	<b>Item Reuse</b> <input type="checkbox"/> Lesson 11 requires the prepared 2019 daytime length tables and the prepared June 2020 daytime length storyboard.	
<b>Resources</b>	<input type="checkbox"/> Lesson 9 Resource A: Science Challenge Rubric <input type="checkbox"/> Lesson 9 Resource C: June 2020 Farmer’s Observations <input type="checkbox"/> Lesson 10 Resource A: 2020 Daytime Length Storyboards  <input type="checkbox"/> Lesson 10 Resource B: 2018 and 2019 Daytime Length Tables	
<b>Preparation</b>	<input type="checkbox"/> Prepare 2020 daytime length storyboards. (See Lesson 10 Resource A.) <input type="checkbox"/> Set up six daytime length stations. At each station, display two different prepared 2020 daytime length storyboards. <input type="checkbox"/> Prepare 2018 and 2019 daytime length tables. (See Lesson 10 Resource B.)	

## Lesson 11

<b>Materials</b>	<b>Kit Items</b> None  <b>Module 1 Kit</b> <input type="checkbox"/> Sentence strip (1)	<b>School Supplied Items</b> <input type="checkbox"/> Scissors (1) <input type="checkbox"/> Tape (partial roll)
	<b>Prepared Items from Previous Lessons</b> <input type="checkbox"/> 2019 daytime length tables from Lesson 10 (6 of each table) <input type="checkbox"/> June 2020 daytime length storyboard from Lesson 10 (1)	
<b>Resources</b>	<input type="checkbox"/> Lesson 9 Resource A: Science Challenge Rubric <input type="checkbox"/> Lesson 11 Resource: Farmer’s Schedules	
<b>Preparation</b>	<input type="checkbox"/> Prepare classroom and group versions of the farmer’s schedule. (See Lesson 11 Resource.)	






## Lesson 12

<b>Materials</b>	<b>Kit Items</b> None	<b>School Supplied Items</b> <input type="checkbox"/> Scissors (1)
	<b>Item Reuse</b> <input type="checkbox"/> Lesson 13 requires the prepared class flower markets chart and 1 set of the prepared plant tags.	
<b>Resources</b>	<input type="checkbox"/> Lesson 9 Resource A: Science Challenge Rubric <input type="checkbox"/> Lesson 12 Resource A: Flower Market Photograph  <input type="checkbox"/> Lesson 12 Resource B: Plant Photographs  <input type="checkbox"/> Lesson 12 Resource C: Plant Tags	
<b>Preparation</b>	<input type="checkbox"/> Prepare plant tags. (See Lesson 12 Resource C.)	

## Lesson 13



<b>Materials</b>	<b>Kit Items</b> None	<b>School Supplied Items</b> None
	<b>Prepared Items from Previous Lesson</b> <input type="checkbox"/> Class flower markets chart from Lesson 12 (1) <input type="checkbox"/> Plant tags from Lesson 12 (1 set)	
<b>Resources</b>	<input type="checkbox"/> Lesson 9 Resource A: Science Challenge Rubric	
<b>Preparation</b>	None	

## Lesson 14




<b>Materials</b>	<b>Kit Items</b> <input type="checkbox"/> Acetate sheets, transparent, 8.5" × 11" (25) <input type="checkbox"/> Labels, adhesive, 0.5" × 1.75" (75)	<b>School Supplied Items</b> <input type="checkbox"/> Marker, permanent, black (1) <input type="checkbox"/> Markers, permanent, 4 colors (4 each color) <input type="checkbox"/> Scissors (1) <input type="checkbox"/> Tape, clear (partial roll)
	<b>Resources</b> <input type="checkbox"/> Lesson 14 Resource A: Stargazers Illustration  <input type="checkbox"/> Lesson 14 Resource B: July Night Sky Photographs  <input type="checkbox"/> Lesson 14 Resource C: Labeled July Night Sky Photograph  <input type="checkbox"/> Lesson 14 Resource D: Star A–D Observation Station Setup Instructions <input type="checkbox"/> Lesson 14 Resource E: Star A–D Observation Photographs <input type="checkbox"/> Lesson 14 Resource F: Plastic Observation Sheet Preparation Instructions	
<b>Preparation</b>	<input type="checkbox"/> Set up Star A–D observation stations. (See Lesson 14 Resource D.) <input type="checkbox"/> Prepare plastic observation sheets. (See Lesson 14 Resource F.)	





## Lesson 15

<b>Materials</b>	<b>Kit Items</b> None	<b>School Supplied Items</b> <input type="checkbox"/> Marker, dry erase (1)
	<b>Item Reuse</b> <input type="checkbox"/> Lesson 16 requires the prepared class star observations chart.	
<b>Resources</b>	<input type="checkbox"/> Lesson 14 Resource A: Stargazers Illustration <input type="checkbox"/> Lesson 14 Resource C: Labeled July Night Sky Photograph  <input type="checkbox"/> Lesson 15 Resource: Star E–I Observation Photographs	
<b>Preparation</b>	<input type="checkbox"/> Set up Star E–I observation stations. Place the appropriate photograph chart (Lesson 15 Resource) at each station. Depending on class size, consider printing an additional copy of each photograph chart and setting up two observation stations for each star. <input type="checkbox"/> Cue July night sky video, January night sky video, and April night sky video: <a href="http://phdsci.link/1851">http://phdsci.link/1851</a> , <a href="http://phdsci.link/1852">http://phdsci.link/1852</a> , <a href="http://phdsci.link/1853">http://phdsci.link/1853</a> . 	




## Lesson 16

<b>Materials</b>	<b>Kit Items</b> <input type="checkbox"/> Knowledge Deck™ cards, Polaris (24) <input type="checkbox"/> Knowledge Deck poster, Polaris (1) <input type="checkbox"/> Sticky note arrows (26)	<b>School Supplied Items</b> <input type="checkbox"/> Marker, dry erase (1)
	<b>Module 1 Kit</b> <input type="checkbox"/> Magnifiers, handheld, plastic (12) <input type="checkbox"/> Sentence strips (2)	
	<b>Prepared Items from Previous Lessons</b> <input type="checkbox"/> Class star observations chart from Lesson 15 (1)	
<b>Resources</b>	<input type="checkbox"/> Lesson 14 Resource A: Stargazers Illustration  <input type="checkbox"/> Lesson 16 Resource A: July Night Sky Telescope Photographs  <input type="checkbox"/> Lesson 16 Resource B: October Night Sky Photographs 	
<b>Preparation</b>	None	



## Lesson 17

<b>Materials</b>	<b>Kit Items</b> None	<b>School Supplied Items</b> <input type="checkbox"/> Scissors (1) <input type="checkbox"/> Tape, clear (partial roll)
<b>Resources</b>	<input type="checkbox"/> Lesson 17 Resource A: Hawaii Night Sky Photographs  <input type="checkbox"/> Lesson 17 Resource B: Conceptual Checkpoint Part A  <input type="checkbox"/> Lesson 17 Resource C: Arcturus Observation Cards <input type="checkbox"/> <i>Island Below the Star</i> (Rumford 2022)	
<b>Preparation</b>	<input type="checkbox"/> Prepare to distribute a copy of Lesson 17 Resource B to each student. <input type="checkbox"/> Prepare Arcturus observation cards. (See Lesson 17 Resource C.)	

## Lesson 18

<b>Materials</b>	<b>Kit Items</b> <input type="checkbox"/> Acetate sheets, transparent, 8.5" × 11" (6) <input type="checkbox"/> Sticky note arrows (6)	<b>School Supplied Items</b> <input type="checkbox"/> Binder clips, extra-large (12) <input type="checkbox"/> Marker, permanent, black (1) <input type="checkbox"/> Scissors (1)
<b>Resources</b>	<input type="checkbox"/> Lesson 18 Resource A: Arcturus over Polynesia Model Setup Instructions <input type="checkbox"/> Lesson 18 Resource B: Arcturus over Polynesia Model Map <input type="checkbox"/> Lesson 18 Resource C: Conceptual Checkpoint Part B  <input type="checkbox"/> Lesson 18 Resource D: Conceptual Checkpoint Part C  <input type="checkbox"/> Lesson 18 Resource E: Easter Island Statues Photograph 	
<b>Preparation</b>	<input type="checkbox"/> Prepare Arcturus over Polynesia models. (See Lesson 18 Resource A.) <input type="checkbox"/> Prepare to distribute a copy of Lesson 18 Resource C to each student. <input type="checkbox"/> Prepare to distribute a copy of Lesson 18 Resource D to each student.	


### Lesson 19

<b>Materials</b>	<b>Kit Items</b> None  <b>Module 1 Kit</b> <input type="checkbox"/> Sentence strips (2)	<b>School Supplied Items</b> <input type="checkbox"/> Computers or tablets with internet access (6–12) <input type="checkbox"/> Scissors (1)
	<b>Item Reuse</b> <input type="checkbox"/> Lesson 20 requires the prepared class Moon observations chart.	
<b>Resources</b>	<input type="checkbox"/> Lesson 19 Resource A: Daytime and Nighttime Moon Photographs  <input type="checkbox"/> Lesson 19 Resource B: January Moon Photograph	
<b>Preparation</b>	<input type="checkbox"/> Cue January 6 Moon observation video: <a href="http://phdsci.link/1869">http://phdsci.link/1869</a> .  <input type="checkbox"/> Prepare January Moon photograph. (See Lesson 19 Resource B.) <input type="checkbox"/> Set up Moon observation stations. Cue the April 6 video, July 6 video, and October 6 video to play at the stations: <a href="http://phdsci.link/1866">http://phdsci.link/1866</a> , <a href="http://phdsci.link/1867">http://phdsci.link/1867</a> , <a href="http://phdsci.link/1868">http://phdsci.link/1868</a> . For most class sizes, set up two of each station. If possible, set up two computers or tablets at each station so students can watch the Moon’s path more closely. Adjust group size according to computer and tablet availability.	


### Lesson 20

<b>Materials</b>	<b>Kit Items</b> None	<b>School Supplied Items</b> <input type="checkbox"/> Scissors (1) <input type="checkbox"/> Tape (partial roll)
	<b>Prepared Items from Previous Lessons</b> <input type="checkbox"/> Class Moon observations chart from Lesson 19 (1)	
<b>Resources</b>	<input type="checkbox"/> Lesson 20 Resource A: January 2020 Moon Data Chart <input type="checkbox"/> Lesson 20 Resource B: April 2020 Moon Data Chart	
<b>Preparation</b>	<input type="checkbox"/> Prepare January 2020 Moon data charts and January 27 row. (See Lesson 20 Resource A.)	


## Lesson 21

<b>Materials</b>	<b>Kit Items</b> None	<b>School Supplied Items</b> <input type="checkbox"/> Glue sticks (6) <input type="checkbox"/> Scissors (1) <input type="checkbox"/> Tape (partial roll)
<b>Resources</b>	<input type="checkbox"/> Lesson 20 Resource B: April 2020 Moon Data Chart  <input type="checkbox"/> Lesson 21 Resource A: Moon Evidence Cards <input type="checkbox"/> Lesson 21 Resource B: Moon Argument Poster <input type="checkbox"/> Lesson 21 Resource C: Complete April 2020 Moon Data Chart	
<b>Preparation</b>	<input type="checkbox"/> Before the lesson, post a sheet of chart paper labeled April 21 and a sheet of chart paper labeled April 23 on opposite walls in the classroom. <input type="checkbox"/> Prepare Moon evidence cards. (See Lesson 21 Resource A.) <input type="checkbox"/> Prepare Moon argument posters. (See Lesson 21 Resource B.)	




## Lesson 22

<b>Materials</b>	<b>Kit Items</b> None	<b>School Supplied Items</b> None
<b>Resources</b>	<input type="checkbox"/> Lesson 22 Resource: Conceptual Checkpoint  <input type="checkbox"/> <i>Island Below the Star</i> (Rumford 2022)	
<b>Preparation</b>	<input type="checkbox"/> Prepare to distribute a copy of Lesson 22 Resource to each student.	


## Lesson 23

<b>Materials</b>	<b>Kit Items</b> None	<b>School Supplied Items</b> <input type="checkbox"/> Scissors (1)
<b>Resources</b>	<input type="checkbox"/> Lesson 2 Resource A: Polynesia and Surrounding Landforms Map  <input type="checkbox"/> Lesson 23 Resource: Key Term Cards	
<b>Preparation</b>	<input type="checkbox"/> Prepare key term cards. (See Lesson 23 Resource.)	

## Lesson 24

Materials	Kit Items	School Supplied Items
	None	None
Resources	<input type="checkbox"/> Lesson 24 Resource A: Dung Beetle Observations Chart  <input type="checkbox"/> Lesson 24 Resource B: April 2020 Moon Data Chart Section	
Preparation	<input type="checkbox"/> Cue Arctic poppy video: <a href="http://phdsci.link/1873">http://phdsci.link/1873</a> .  <input type="checkbox"/> Cue dung beetle video: <a href="http://phdsci.link/1874">http://phdsci.link/1874</a> .  <input type="checkbox"/> Prepare to distribute a copy of Lesson 24 Resource A to each student. <input type="checkbox"/> Prepare to distribute a copy of Lesson 24 Resource B to each student.	

## Lesson 25

Materials	Kit Items	School Supplied Items
	None	<input type="checkbox"/> Scissors (1)
Resources	<input type="checkbox"/> Lesson 25 Resource: Patterns Card	
Preparation	<input type="checkbox"/> Cue Arctic poppy video: <a href="http://phdsci.link/1873">http://phdsci.link/1873</a> .  <input type="checkbox"/> Score End-of-Module Assessment and write individual feedback. <input type="checkbox"/> Select at least one End-of-Module Assessment item for the class to debrief, and prepare a sample response for that item to share with students. <input type="checkbox"/> Prepare patterns card. (See Lesson 25 Resource.) <input type="checkbox"/> Select student work products that show evidence of three-dimensional learning, and display them in different areas of the classroom. Student work products may include the anchor model, other class charts, selected Science Logbook pages, and module resources.	

---

## Works Cited

Rumford, James. (2016) 2022. *Island Below the Star: How the First People Came to Hawai'i*. Honolulu: Mānoa Press and Washington, DC: Great Minds Press. [All references to *Island Below the Star* are from this source.]

---

## Credits

Great Minds® has made every effort to obtain permission for the reprinting of all copyrighted material. If any owner of copyrighted material is not acknowledged herein, please contact Great Minds for proper acknowledgment in all future editions and reprints of this guide.

Page 2, Hiker looking at compass video by Ascent Xmedia/Image Bank Film: Signature/Getty Images; pages 3, 5, Hiker video by stockstudioX/Creatas Video/Getty Images; page 5, Modern boat video by Igor Burenko/Shutterstock.com; page 6, Strawberry plant growth video by BlackLight Films - Louie Schwartzberg/Image Bank Film/Getty Images; page 9; July, January, and April night sky videos generated by Stellarium Labs and Noctua Software Ltd.; page 11, January 6 Moon observation, April 6, July 6, and October 6 videos generated by Stellarium Labs and Noctua Software Ltd.; page 13, Arctic poppy video by BBC Natural History/BBC Creative/Getty Images, Dung beetle video by Giuma/Shutterstock.com.