GRADE 3 LEARNING PACK

Earth, Sun & Moon: Observable Patterns

Use models and observations to explain basic day/night and changing appearance of the Moon without unsafe viewing.

LEARN • PRACTISE • CREATE • REFLECT

Original BrightPencil Kids resource - adult-led where appropriate

A4 edition • 12 purposeful pages • review copy

Print. Learn. Grow.

FOR PARENTS & TEACHERS

Grown-up guide

Learning objective

Use models and observations to explain basic day/night and changing appearance of the Moon without unsafe viewing.

Use this pack well

- Model the first example aloud, then let the learner try.
- Ask “How do you know?” more often than “Are you finished?”.
- Use real objects, talk, movement or observation when the activity suggests it.
- Stop or shorten the session if attention or enjoyment drops.
- Open-ended pages can have many successful answers.

Quality note

This resource was written originally for BrightPencil Kids. Curriculum sources informed scope and progression only; no third-party worksheet or story text is reproduced.

STUDY

Learn the idea

1 **Earth rotates, producing the cycle of day and night.**

2 **The Moon reflects sunlight and its visible phase changes as positions change.**

3 **Models are simplified representations, not the real scale.**

Talk about it

Explain one idea in your own words. Give an example from real life, a drawing or an object if that helps.

PRACTISE

Guided practice

Challenge 1

Use a globe/ball and lamp model to show day/night.

Challenge 2

Explain why it is day on one side of Earth and night on the other.

PRACTISE

Build the skill

Challenge 3

Sequence four broad Moon-phase images.

Challenge 4

Identify a limitation of a classroom model.

PRACTISE

Independent thinking

Challenge 5

State safe Sun-observation rules.

APPLY

Try it beyond the page

Real-world / hands-on connection

Observe the Moon from a safe place over several evenings with an adult and draw its apparent shape; never look directly at the Sun.

Before you finish

What did you notice?

What evidence, object or example helped you?

What would you change if you tried again?

CREATE

Create something

Your project

Create a day/night model diagram and a Moon observation journal page.

Use this space for planning, drawing, mapping, designing or notes.

CHALLENGE

Think deeper

1. What causes day and night?

2. Does the Moon make its own visible light?

3. Why are models useful but limited?

REVIEW

Quick review

1. In one sentence, explain the big idea of “Earth, Sun & Moon: Observable Patterns”.

2. Draw or write one example that shows you understand.

3. Choose one activity from this pack and explain the strategy you used.

4. Write one question you still have.

FOR GROWN-UPS

Answer & discussion notes

Use these as guidance, not scripts. Open questions can have different successful responses when the reasoning is sensible and evidence-based.

1. Suggested response

Earth’s rotation.

2. Suggested response

No, it reflects sunlight.

3. Suggested response

They help explain ideas but simplify size/distance/details.

Review before publication

Check age fit, factual accuracy, clarity, accessibility, rights provenance and whether the activity works in practice. This file remains a review copy until those checks are signed off.

FINISH

My learning reflection

I finished this BrightPencil learning pack.

One thing I understand better now:

A strategy that helped me:

Something I created or noticed:

My next small question or goal:

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