

TEACHING KIT

Full Term Teaching Kit

Lesson plans, activities and assessments

Presenter Name · 6 · 2026



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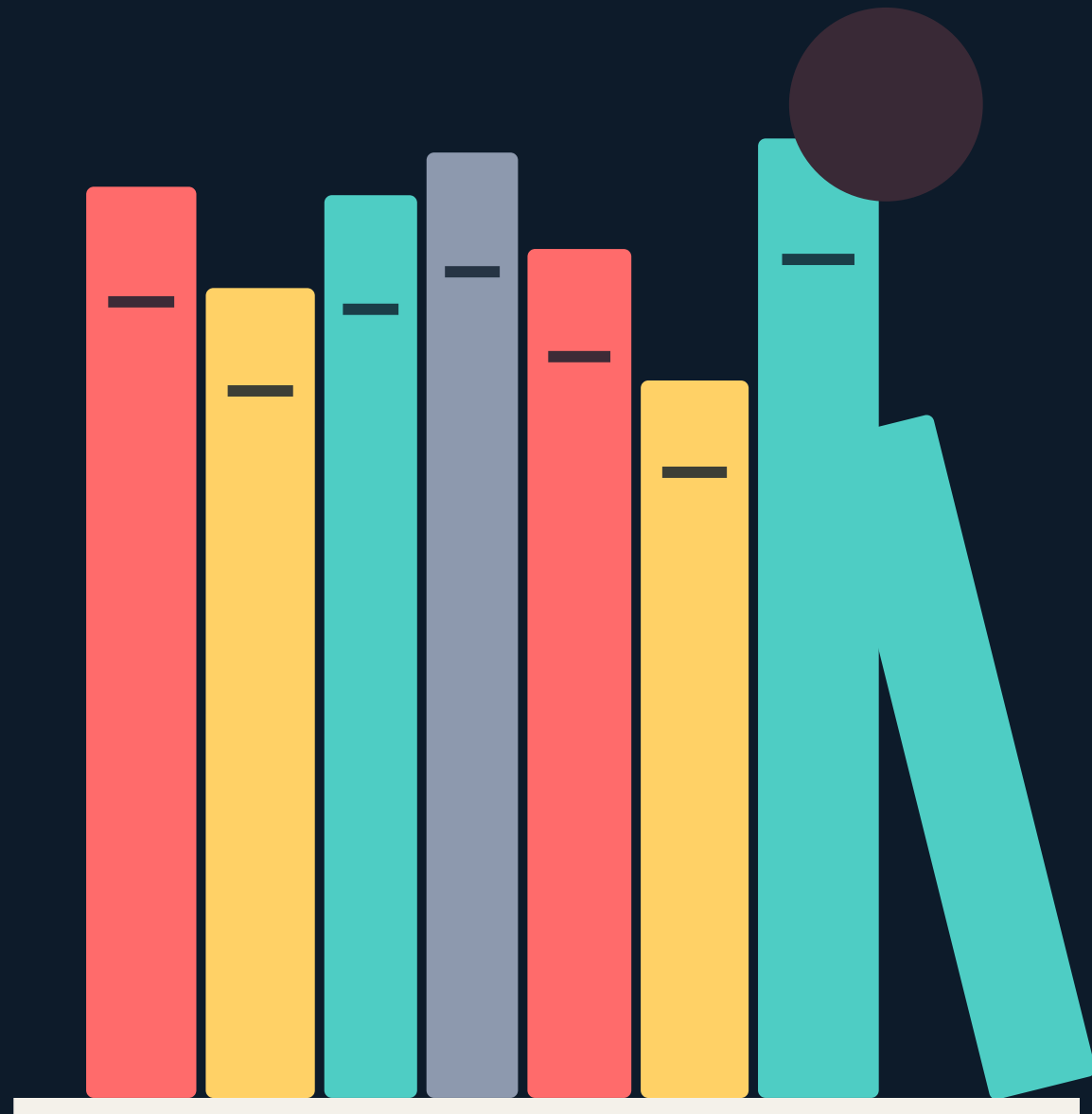
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01

FRACTIONS MADE EASY





Parts of a whole, equivalent fractions and comparing

Lesson 1 · Fractions Made Easy

LESSON 1

Learning objectives

- Understand a fraction as part of a whole
- Find equivalent fractions
- Compare fractions
- Use fractions in everyday problems

YOU ALREADY KNOW

How to divide a shape into equal parts.

LESSON 1

What is a fraction?



Diagram / picture

A fraction shows equal parts of a whole.

The bottom number (denominator) tells how many equal parts the whole is cut into. The top number (numerator) tells how many parts we take.

Key terms

01

Numerator

The number of parts we take.

02

Denominator

The number of equal parts in the whole.

03

Equivalent

Different fractions with the same value.

LESSON 1

Finding equivalent fractions



Pick

Start with $\frac{1}{2}$



Multiply

Top and bottom by the same number



Check

$\frac{2}{4}$, $\frac{3}{6}$, $\frac{4}{8}$ all equal $\frac{1}{2}$



Draw

Shade shapes to prove it

LESSON 1

Comparing with one half

Fraction	Picture	Compared with $\frac{1}{2}$
$\frac{1}{4}$	One of four parts	Smaller
$\frac{3}{4}$	Three of four parts	Bigger
$\frac{2}{4}$	Two of four parts	Equal

Draw each fraction to check.

LESSON 1

Did you know?

$\frac{1}{2}$

the most common
fraction in recipes

100

hundredths make one
whole

4,000

years of fractions in
history

LESSON 1

Real-life examples



Image 1

Sharing food

Pizza, rotis and fruit



Image 2

Time

Half an hour, quarter past



Image 3

Money

50 paise is half a rupee

Proper vs improper

Proper

- Numerator smaller
- Less than one whole
- e.g. $\frac{3}{5}$

vs

Improper

- Numerator bigger
- More than one whole
- e.g. $\frac{7}{4}$

Check your understanding

- Which is bigger: $\frac{3}{8}$ or $\frac{5}{8}$?
- Write two fractions equal to $\frac{1}{3}$
- What fraction of an hour is 15 minutes?
- Shade $\frac{2}{5}$ of a rectangle

LESSON 1

Activity time

01

Fraction strips

Cut strips into halves, quarters and eighths.

02

Pizza maths

Share paper pizzas fairly.

03

Fraction hunt

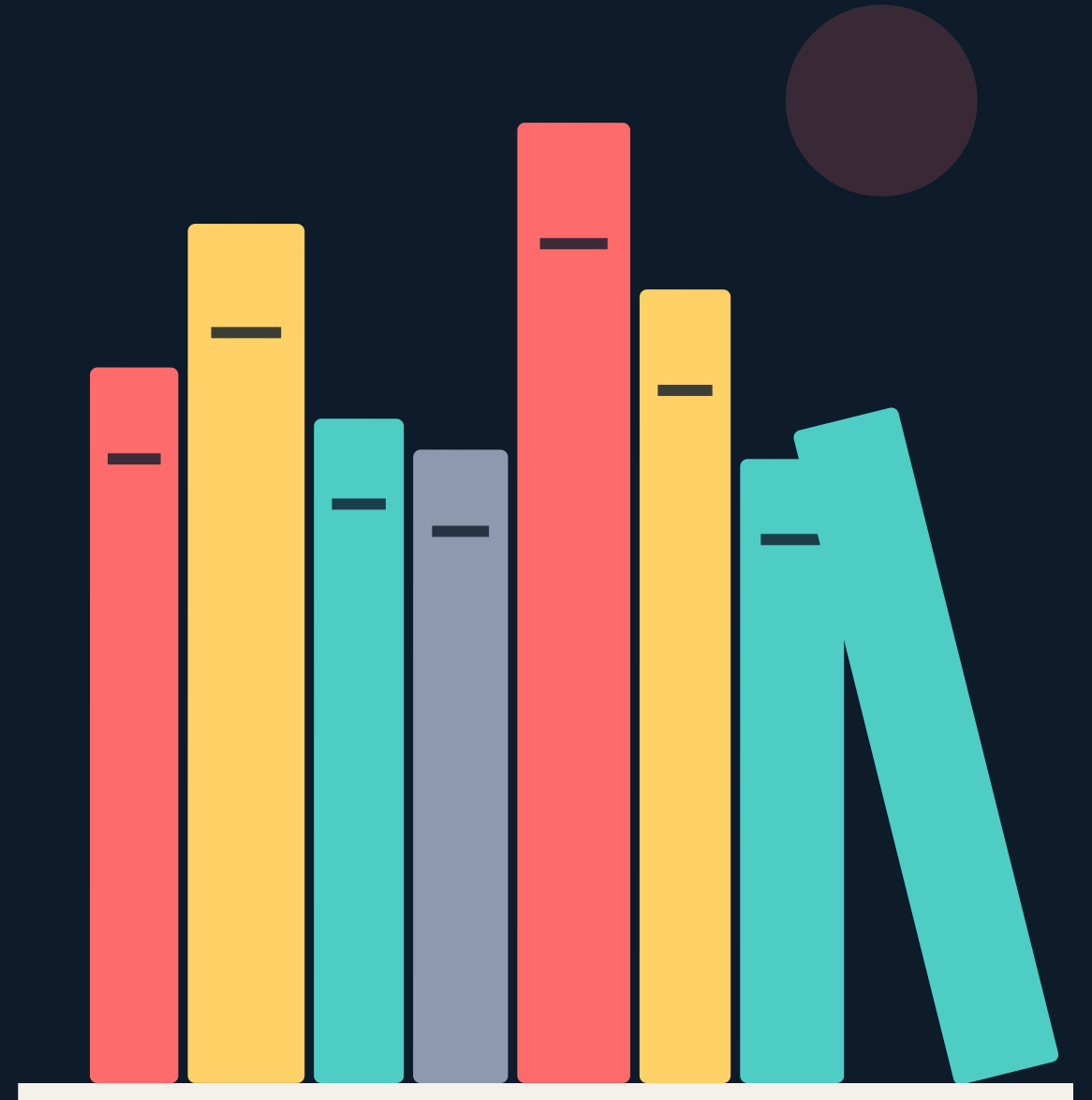
Find fractions around the classroom.

Homework

- Exercise 4.2, questions 1–6
- Find three fractions at home and draw them
- Make a fraction wall chart

02

PARTS OF SPEECH





Nouns, verbs, adjectives and their friends

Lesson 2 · Parts of Speech

LESSON 2

Learning objectives

- Name the eight parts of speech
- Identify nouns, verbs and adjectives
- Use adjectives to make writing vivid
- Build correct sentences

YOU ALREADY KNOW

**What a sentence
is.**

LESSON 2

Words have jobs

Each word in a sentence plays a role.

Nouns name things, verbs show action, adjectives describe nouns and adverbs describe verbs. Knowing these jobs helps us write clear, colourful sentences.



Diagram / picture

Key terms

01

Noun

A person, place, animal or thing.

02

Verb

An action or a state of being.

03

Adjective

A word that describes a noun.

LESSON 2

Finding the parts of speech



Read

Read the sentence
aloud



Ask

Who or what? — the
noun



Act

What happens? — the
verb



Describe

What kind? — the
adjective

LESSON 2

Examples

Part of speech	Job	Example
Noun	Names	The dog
Verb	Shows action	runs
Adverb	Tells how	quickly

Add your own row for each.

LESSON 2

Did you know?

8

parts of speech in
English

1 in 4

words we use is a noun

"Set"

has hundreds of
meanings

LESSON 2

Real-life examples



Image 1



Image 2



Image 3

Stories

Adjectives paint pictures

Instructions

Verbs tell us what to do

Labels

Nouns name everything

Adjective or adverb?

Adjective

- Describes a noun
- A happy child
- Answers "what kind?"

vs

Adverb

- Describes a verb
- Sang happily
- Answers "how?"

Check your understanding

- Find the noun: "The red kite flew high."
- Give three action verbs
- Add an adjective: "The ___ elephant"
- Is "slowly" an adjective or an adverb?

Activity time

01

Word sort

Sort cards into noun, verb and adjective boxes.

02

Silly sentences

Build funny sentences from random cards.

03

Describe it

Describe a mystery object with five adjectives.

Homework

- Underline nouns and verbs in a short story
- Write five sentences with adjectives
- Make a parts-of-speech poster

03

INTRODUCTION TO PYTHON





Your first programs: print, variables and input

Lesson 3 · Introduction to Python

LESSON 3

Learning objectives

- Write and run a Python program
- Store values in variables
- Take input from the user
- Do simple calculations

YOU ALREADY KNOW

How to open and save files.

What is a program?



Diagram / picture

A program is a list of instructions a computer follows.

Python reads lines from top to bottom.
`print()` shows output, variables remember values and `input()` asks the user for information.

Key terms

01

Variable

A named box that stores a value.

02

String

Text inside quotes, e.g. "Hello".

03

Integer

A whole number, e.g. 42.

LESSON 3

Your first program



Open

IDLE or an online editor



Ask

```
name = input("Name?  
")
```



Print

```
print("Hello", name)
```



Run

Press F5 and test

LESSON 3

Data types

Type	Example	Use
int	15	Counting
float	3.14	Measuring
str	"Asha"	Text

Use `type()` to check any value.

LESSON 3

Did you know?

1991

Python first released

#1

language for beginners

Not a snake

named after a comedy
show

LESSON 3

Real-life examples



Image 1

Games

Simple quiz games



Image 2

Science

Data and graphs



Image 3

Websites

Back-end servers

Scratch vs Python

Scratch

- Drag-and-drop blocks
- Great for starting
- Visual output

vs

Python

- Typed code
- Used by professionals
- Runs everywhere

Check your understanding

- What does `print()` do?
- Store your age in a variable
- Why is text put in quotes?
- What is $3 + 4 * 2$?

LESSON 3

Activity time

01

Greeting bot

Ask name and age, print a message.

02

Calculator

Add two numbers from input.

03

Bug hunt

Fix five broken programs.

Homework

- Print your timetable with Python
- Convert Celsius to Fahrenheit
- Make three errors and note the messages

04

TRIGONOMET RY BASICS





Sine, cosine and tangent in right triangles

Lesson 4 · Trigonometry Basics

LESSON 4

Learning objectives

- Name the sides of a right triangle
- Define sin, cos and tan
- Recall standard angle values
- Solve height and distance problems

YOU ALREADY KNOW

**Pythagoras
theorem and
similar triangles.**

LESSON 4

Ratios in a right triangle

Trigonometric ratios compare the sides of a right triangle.

For an angle θ : $\sin \theta = \text{opposite/hypotenuse}$, $\cos \theta = \text{adjacent/hypotenuse}$, $\tan \theta = \text{opposite/adjacent}$. The ratios are the same for every triangle with that angle.



Diagram / picture

Key terms

01

Hypotenuse

The longest side,
opposite the right angle.

02

Opposite

The side facing angle θ .

03

Adjacent

The side next to θ .

LESSON 4

Solving a height problem



Draw

Sketch the triangle



Label

Mark θ and the known side



Choose

sin, cos or tan



Solve

Rearrange and calculate

LESSON 4

Standard values

Angle	sin	cos	tan
30°	$\frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{3}}$
45°	$\frac{1}{\sqrt{2}}$	$\frac{1}{\sqrt{2}}$	1
60°	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\sqrt{3}$

Learn these with the hand trick.

LESSON 4

Did you know?

2,000+

years of trigonometry

SOH-CAH-TOA

the classic memory aid

GPS

uses trigonometry

LESSON 4

Real-life examples



Image 1

Architecture

Roofs and ramps



Image 2

Navigation

Ships and aircraft



Image 3

Surveying

Heights of buildings

sin vs cos

sin θ

- Opposite / hypotenuse
- Rises from 0° to 90°
- $\sin 90^\circ = 1$

vs

cos θ

- Adjacent / hypotenuse
- Falls from 0° to 90°
- $\cos 0^\circ = 1$

Check your understanding

- Write $\sin \theta$ in terms of sides
- Find $\tan 45^\circ$
- If $\sin \theta = 1/2$, find θ
- A ladder makes 60° with the ground; find the height it reaches

Activity time

01

Clinometer

Make one from a protractor and a straw.

02

Measure the school

Find the flagpole height.

03

Value bingo

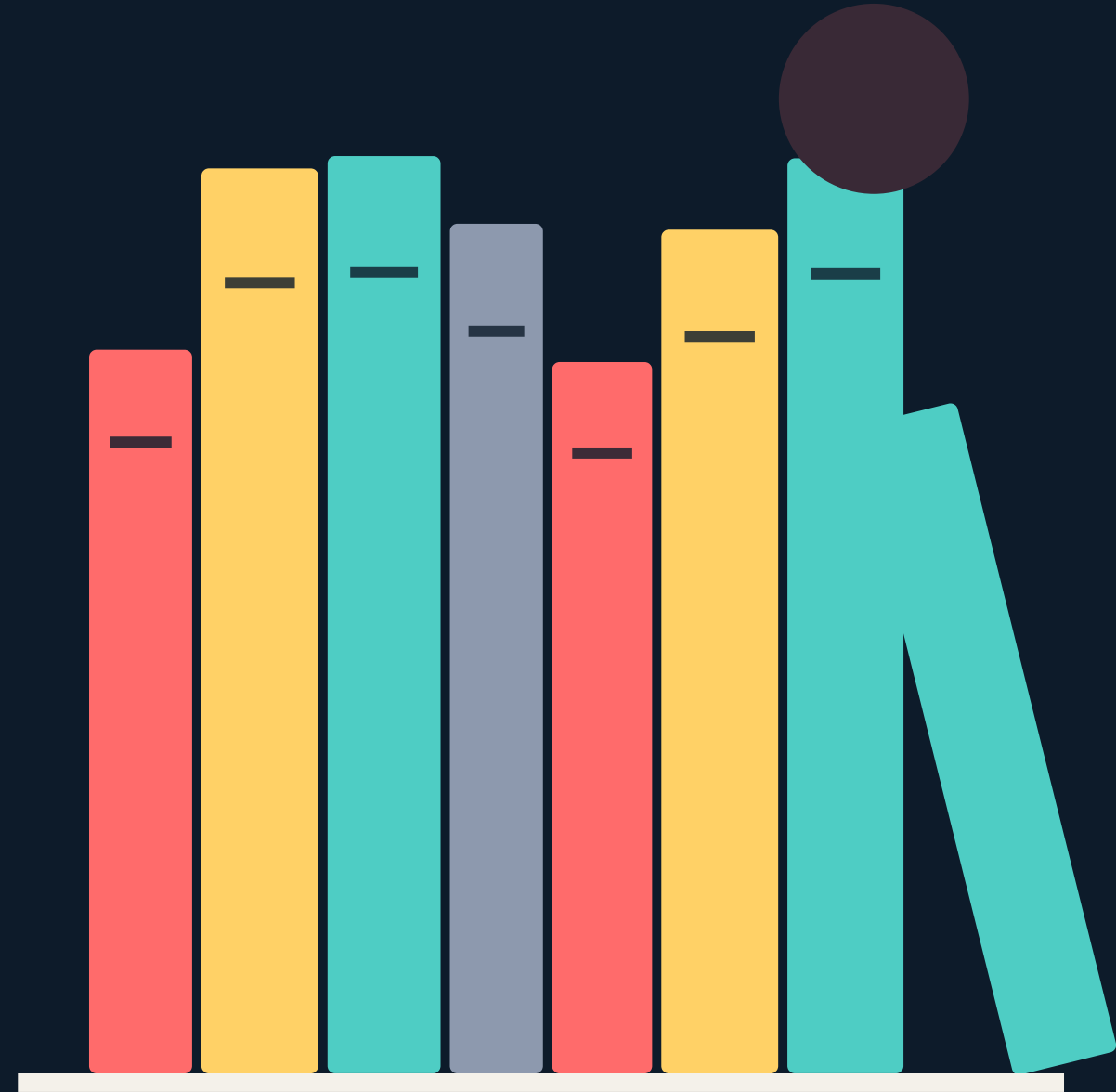
Bingo with standard values.

Homework

- Exercise 8.1, questions 1–5
- Prove $\sin^2\theta + \cos^2\theta = 1$
- Estimate the height of a building near home

05

HEALTHY FOOD HABITS





Balanced diet, nutrients and smart choices

Lesson 5 · Healthy Food Habits

LESSON 5

Learning objectives

- Name the food groups
- Know why we need a balanced diet
- Choose healthy snacks
- Practise good eating habits

YOU ALREADY KNOW

We need food to grow and play.

LESSON 5

A balanced plate



Diagram / picture

A balanced diet has the right amount of every food group.

Grains give energy, dal and milk help us grow, fruits and vegetables keep us healthy, and water helps everything work.

Key terms

01

Carbohydrates

Energy foods like rice and roti.

02

Proteins

Body-building foods like dal and eggs.

03

Vitamins

Protective foods like fruits.

LESSON 5

Build a healthy plate



Half

Fruits and vegetables



Quarter

Rice, roti or millets



Quarter

Dal, paneer or eggs



Side

Curd and water

LESSON 5

Food groups

Group	Gives us	Examples
Energy	Power to play	Rice, roti
Body-building	Growth	Dal, milk
Protective	Good health	Fruits, greens

Draw one food for each group.

LESSON 5

Did you know?

8

glasses of water a day

5

colours of food daily

60%

of our body is water

LESSON 5

Real-life examples



Image 1

Lunch box

Roti, sabzi and fruit



Image 2

Snacks

Chana instead of chips



Image 3

Festivals

Sweets in small bites

Healthy or junk?

Healthy

- Fruit, sprouts, curd
- Energy that lasts
- Helps you grow

vs

Junk

- Chips, soda, candy
- Quick energy, then tired
- Bad for teeth

Check your understanding

- Name two energy foods
- Why do we need water?
- Pick the healthy snack: chips or banana?
- What colours did you eat today?

Activity time

01

Plate art

Make a paper balanced plate.

02

Food sort

Sort pictures into groups.

03

Taste test

Try a new fruit together.

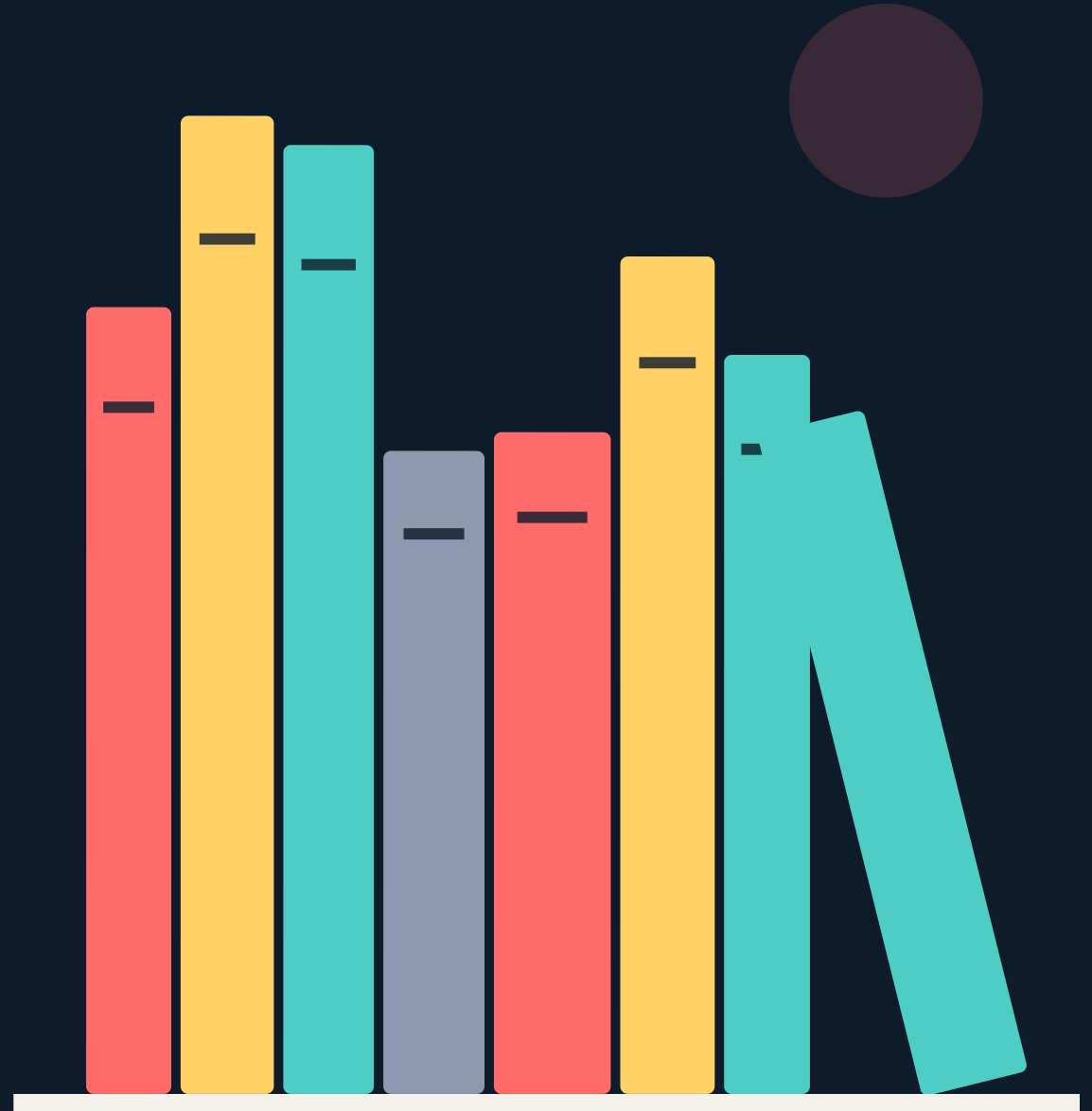
LESSON 5

Homework

- Draw your dinner plate
- Keep a one-week food chart
- Ask family for a healthy recipe

06

LIGHT AND SHADOWS





How light travels and why shadows form

Lesson 6 · Light and Shadows

Learning objectives

- Explain that light travels in straight lines
- Classify transparent, translucent and opaque materials
- Explain how shadows form
- Describe a pinhole camera

YOU ALREADY KNOW

Light comes from sources like the sun and bulbs.

LESSON 6

Light travels in straight lines

Light moves in straight lines called rays.

When an opaque object blocks light, a dark area forms behind it — a shadow. Its size depends on the distances between the light, the object and the screen.



Diagram / picture

Key terms

01

Transparent

Lets almost all light through, e.g. glass.

02

Translucent

Lets some light through, e.g. butter paper.

03

Opaque

Blocks light completely, e.g. wood.

LESSON 6

Make a pinhole camera



Box

Take a small closed box



Pinhole

Make a tiny hole on one side



Screen

Fix tracing paper opposite



Observe

See an upside-down image

LESSON 6

Materials and light

Material	Type	Shadow
Glass	Transparent	Very faint
Oiled paper	Translucent	Light
Cardboard	Opaque	Dark

Test your own materials with a torch.

LESSON 6

Did you know?

3 lakh km

light travels each
second

8 min

for sunlight to reach
Earth

Upside down

pinhole camera images

LESSON 6

Real-life examples



Image 1

Sundials

Shadows tell the time



Image 2

Shadow puppets

Light and hands tell stories



Image 3

Eclipses

The Moon's shadow on Earth

Shadow vs mirror image

Shadow

- Always dark
- No colour or detail
- Light is blocked

vs

Mirror image

- Colour and detail
- Light is reflected
- Same way up

Check your understanding

- Why do shadows form?
- Name one translucent material
- When is your shadow shortest?
- Why is a pinhole image upside down?

Activity time

01

Shadow tracing

Trace a friend's shadow at three times of day.

02

Material test

Sort objects with a torch.

03

Pinhole camera

Build one in groups.

Homework

- Draw how a shadow forms
- List five opaque objects at home
- Write about an eclipse

Thank you

Questions and discussion.

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