

NATURAL SCIENCES & TECHNOLOGY

RESOURCE PACK
GRADE 4 TERM 3



RESOURCE 1.1

<https://www.pexels.com/photo/people-running-during-daytime-33703/>

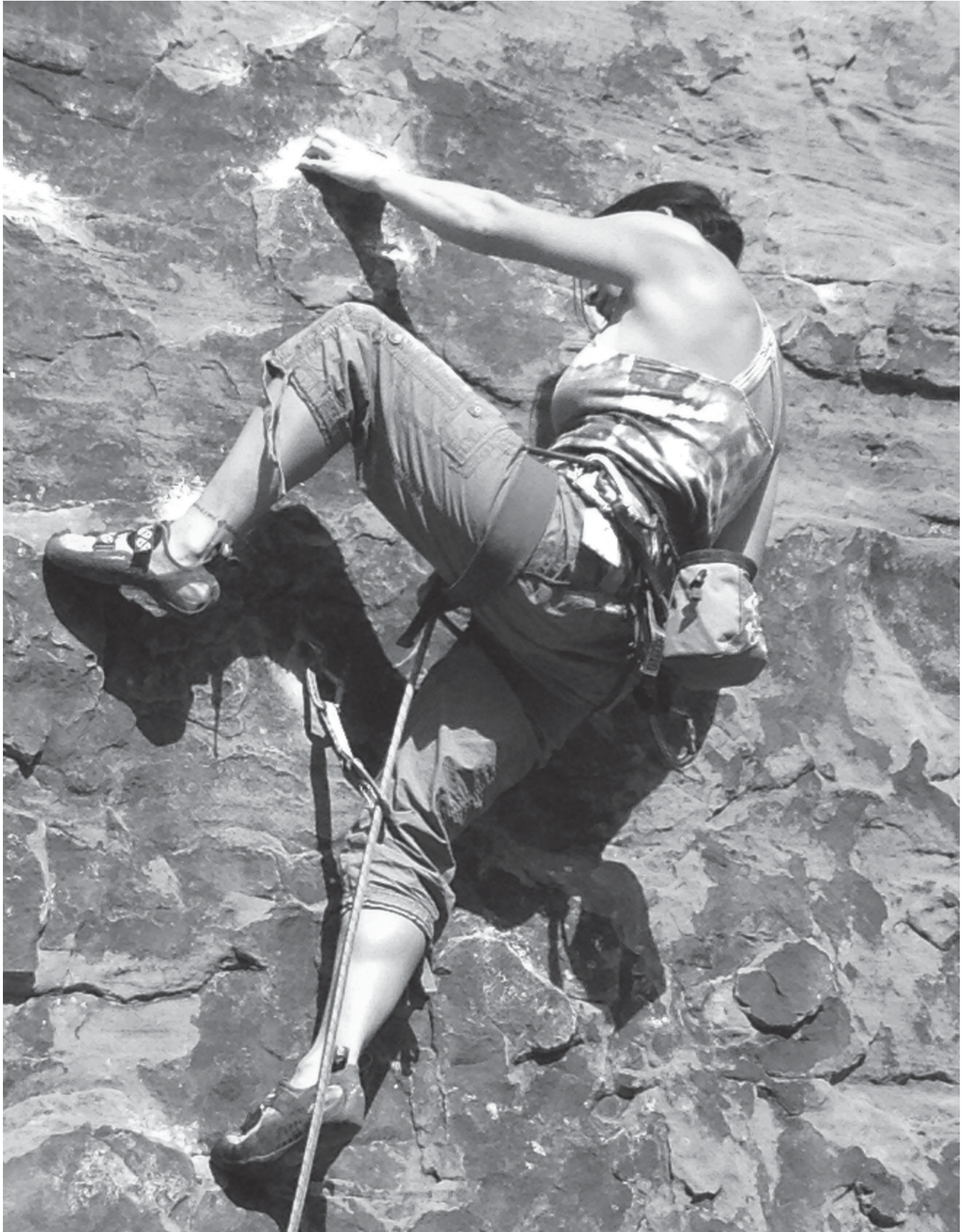
ENERGY FOR LIFE



RESOURCE 1.2

<https://pxhere.com/en/photo/740763>

ENERGY FOR LIFE



RESOURCE 2

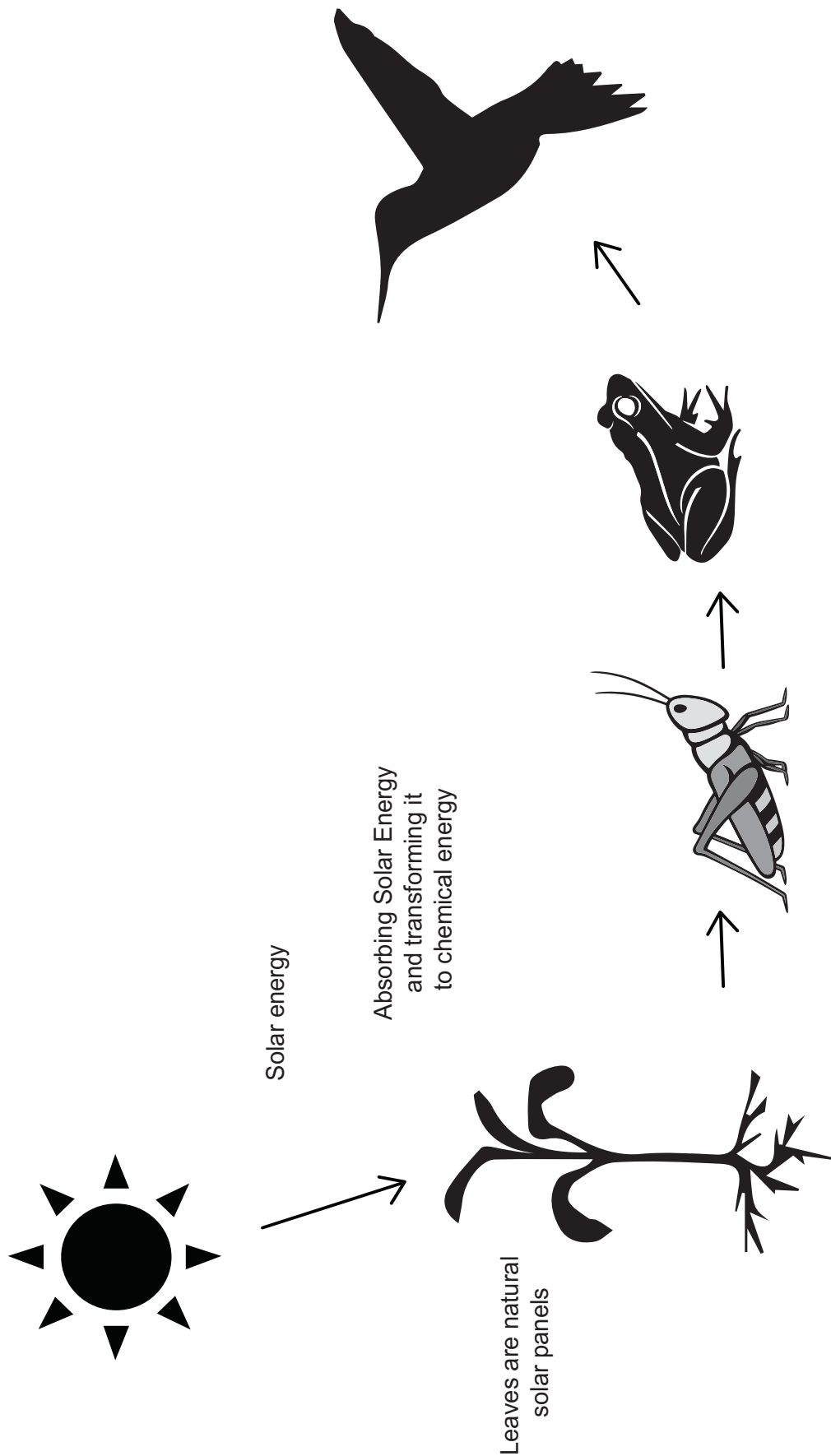
<https://pxhere.com/en/photo/885770>

ENERGY FROM FOOD - Vegetables are good for energy. Fish is a good protein for energy. All nuts are also good for energy.



RESOURCE 3

ENERGY FROM THE SUN



Solar energy

Absorbing Solar Energy and transforming it to chemical energy

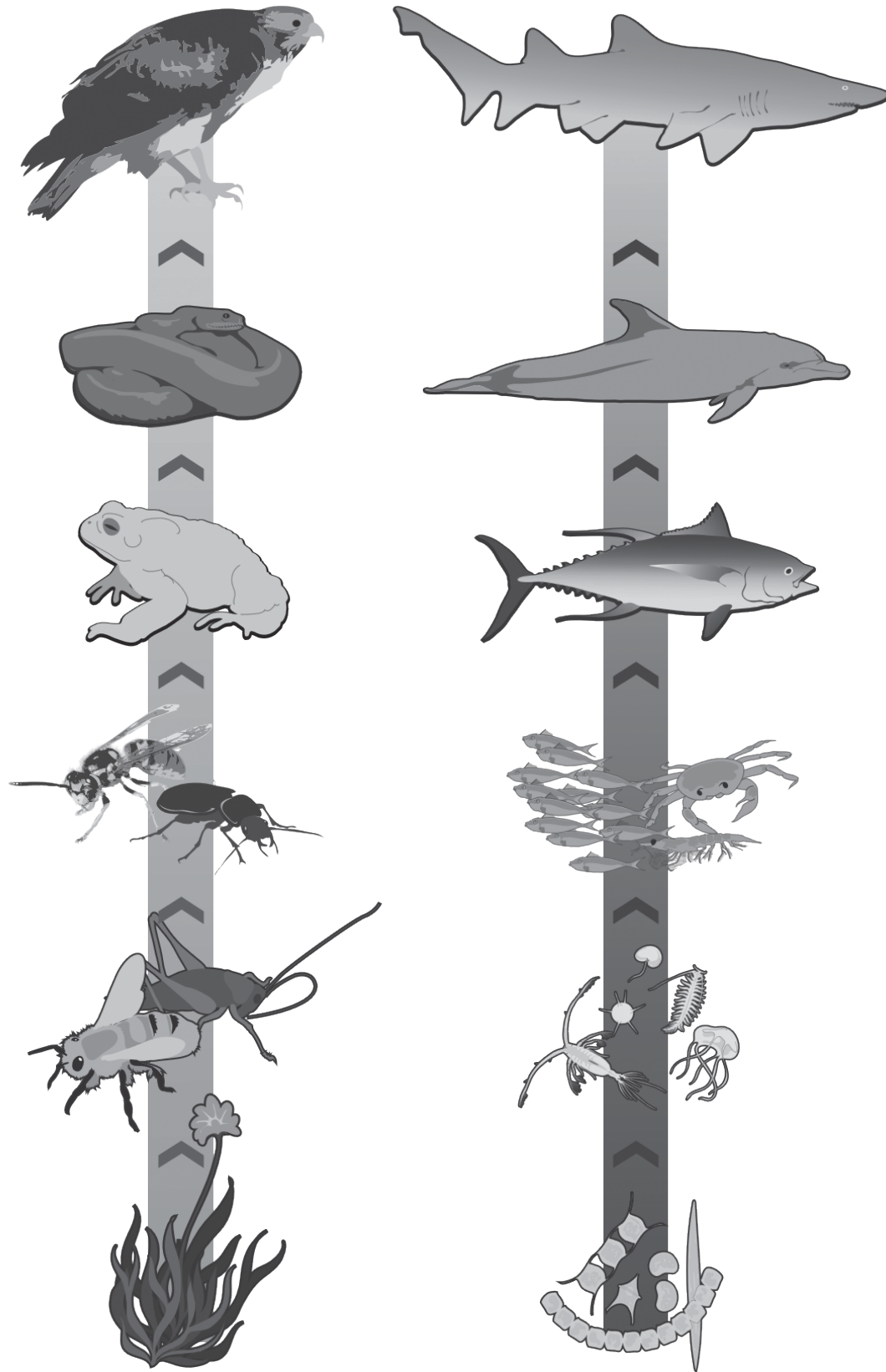
Leaves are natural solar panels

Plant is eaten by grasshopper, is transferred from the plant to the grasshopper, to the frog, to the bird, enabling each in turn to function as living organisms

RESOURCE 4

https://commons.wikimedia.org/wiki/File%3ASimplified_food_chain.svg

FOOD CHAINS - Two food chains showing the path of energy



RESOURCE 5.1

Gwycech/ Shutterstock

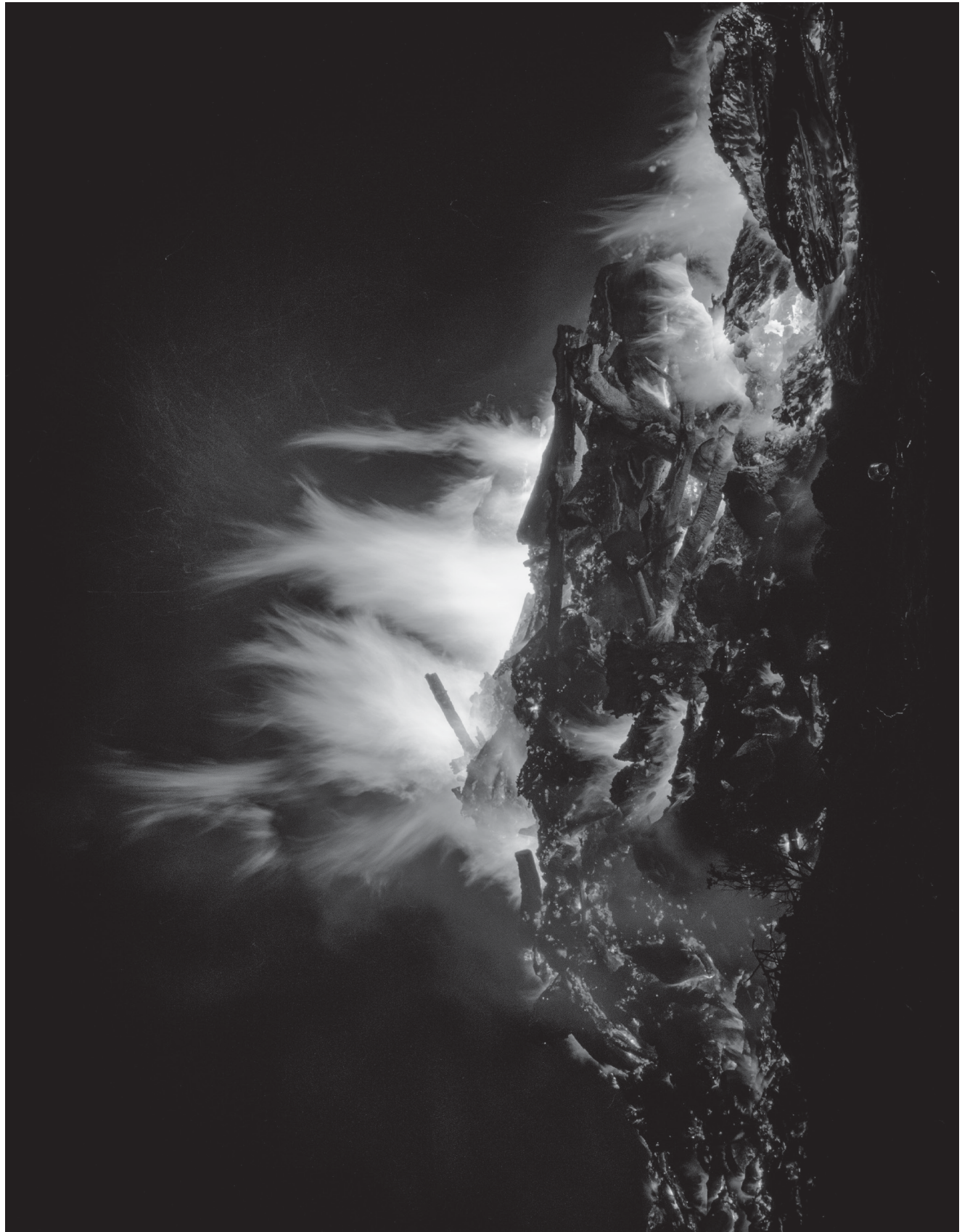
ENERGY AROUND US - Paraffin Lamp



RESOURCE 5.2

<https://www.pexels.com/photo/night-fire-easter-heat-9334/>

ENERGY AROUND US - Fire



RESOURCE 5.3

By Wuzur/Wikipedia, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=5840425>

ENERGY AROUND US - Torch



RESOURCE 6.1

Ra2studio Stock/ Shutterstock

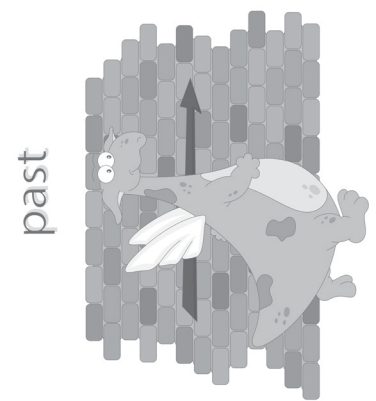
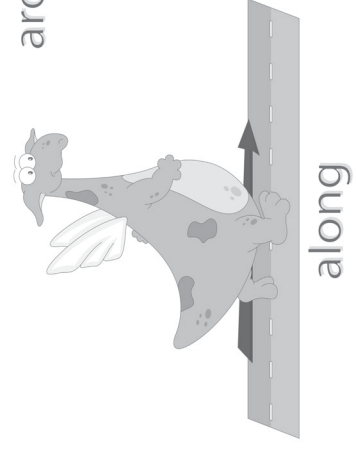
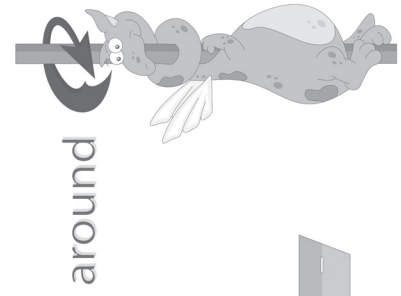
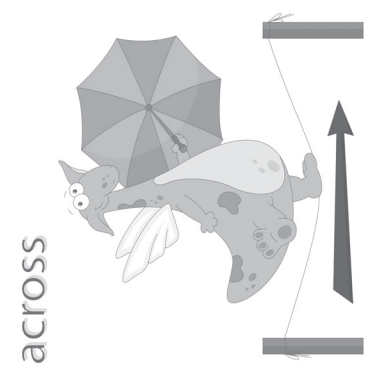
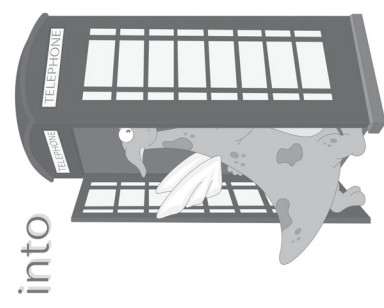
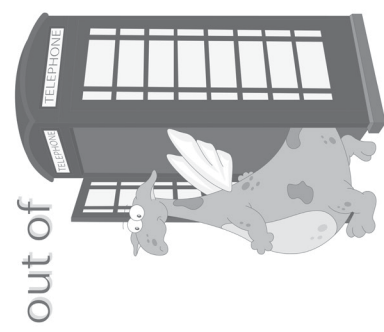
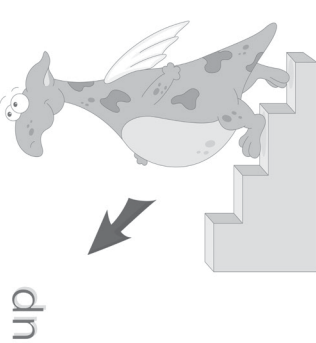
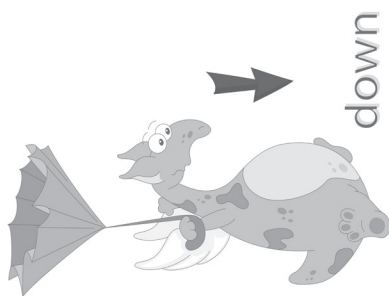
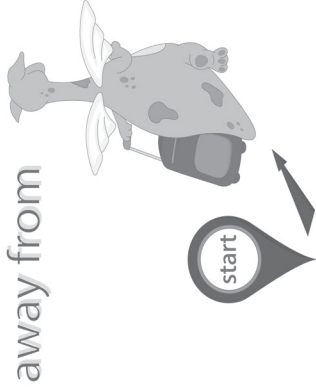
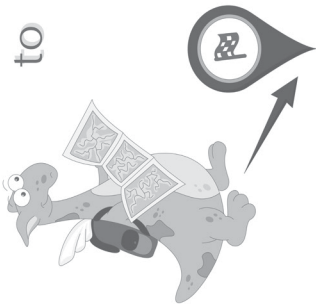
SOUND AND MOVEMENT ENERGY



RESOURCE 6.2

Fir4ik Stock/ Shutterstock

SOUND AND MOVEMENT ENERGY



RESOURCE 7.1

Rudmer Zwerver Stock/ Shutterstock

SOURCES OF STORED ENERGY - Coal



RESOURCE 7.2

Hiroshi Teshigawara/ Shutterstock

SOURCES OF STORED ENERGY - Crude Oil



RESOURCE 8

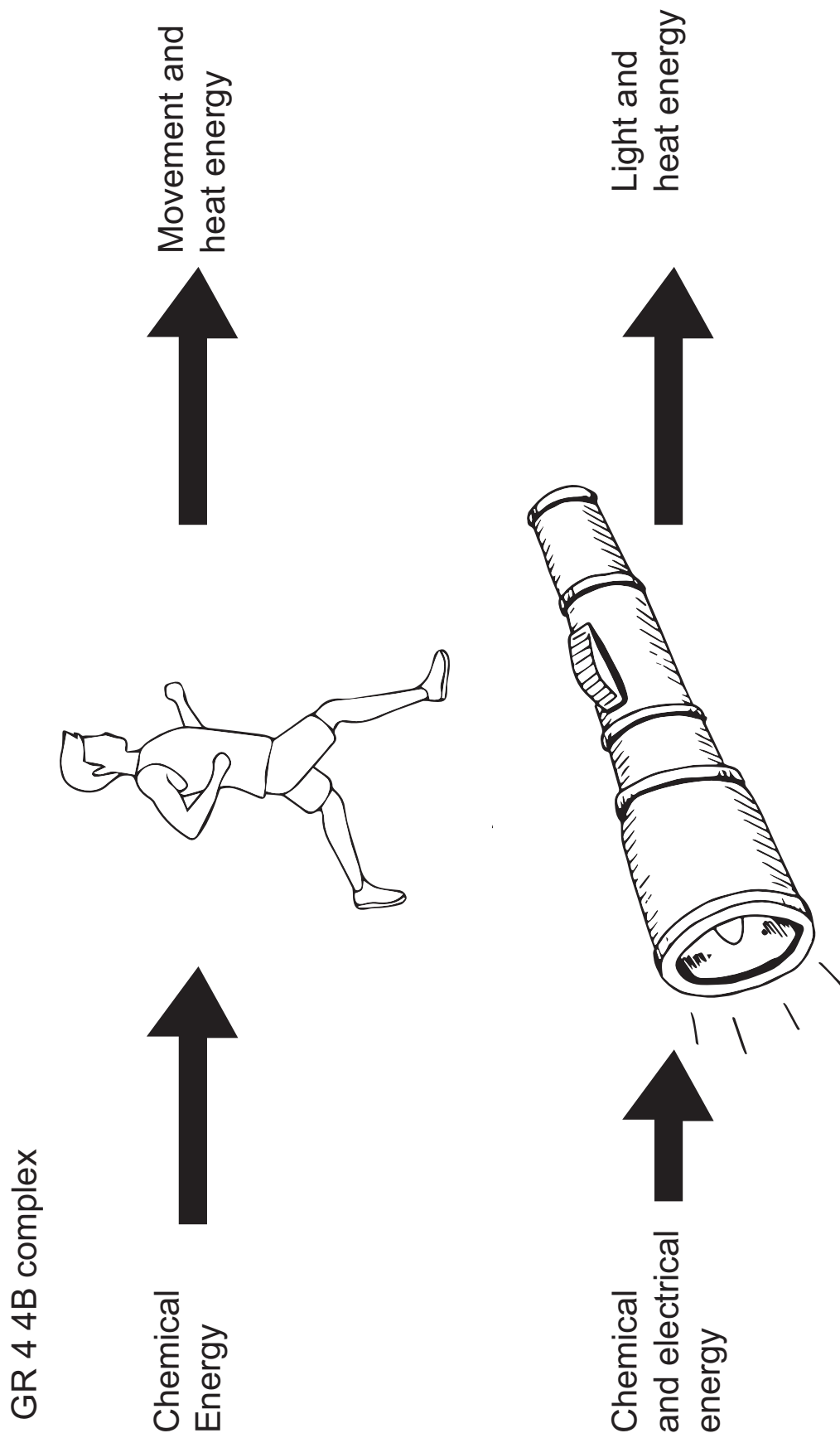
Picture 1: Kayasit Sonsupap/ Shutterstock

Picture 2: TinnaPong/ Shutterstock

ENERGY CAN BE TRANSFERRED



DRAWING A FLOW DIAGRAM



INPUT AND OUTPUT OF ENERGY

Output heat
and light



Input of wood
as fuel



Output sound



Input
electricity for
power



RESOURCE 11

Petr Malyshev/ Shutterstock

USING MACHINES



RESOURCE 12

Picture 1: Stockphoto-graf/ Shutterstock

Picture 2: Sam Singh/ Shutterstock

WORKING MACHINES

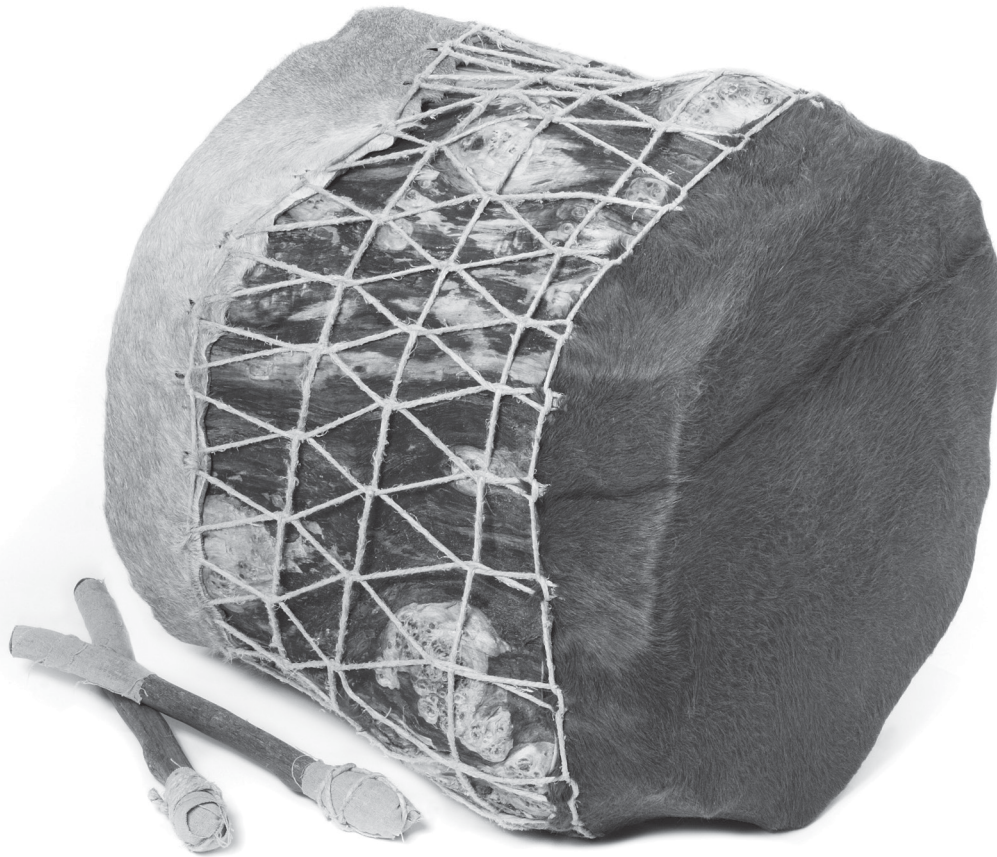


RESOURCE 13.1

Picture 1: Marslander/ Shutterstock

Picture 2: Digitalskillet/ Shutterstock

MOVEMENT AND MUSICAL INSTRUMENTS

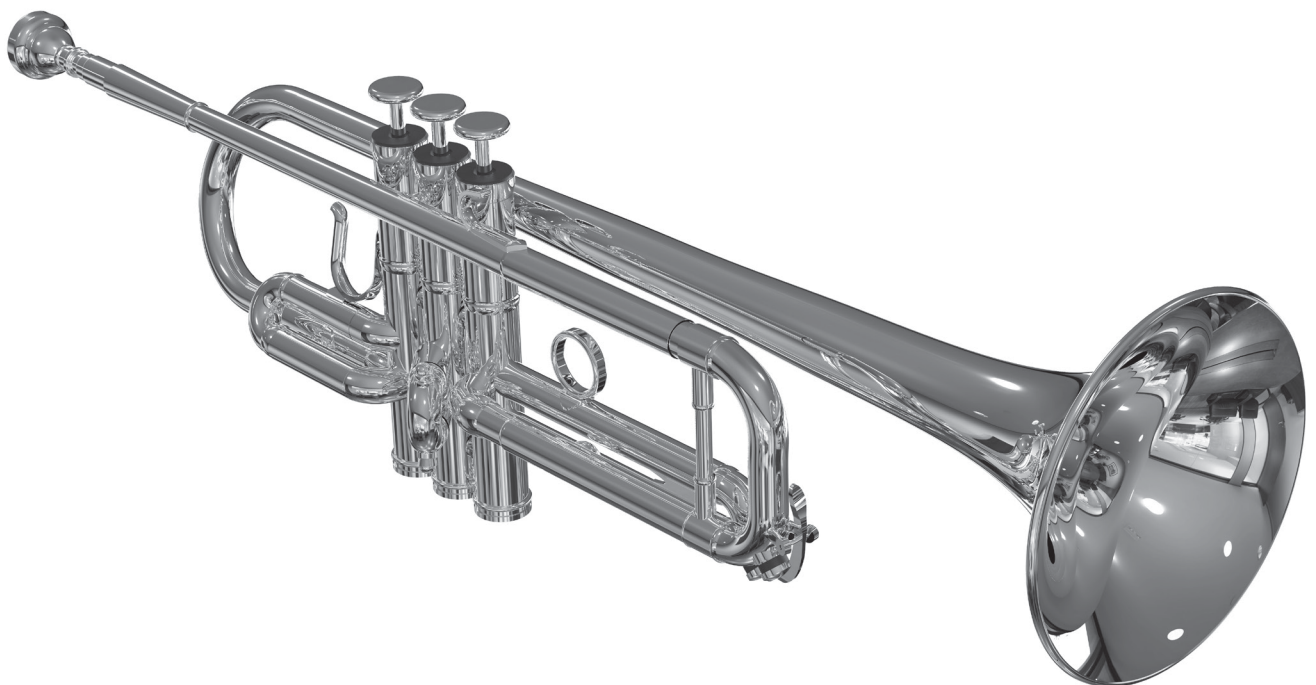


RESOURCE 13.2

Picture 3: Nicholas Sutcliffe/ Shutterstock

Picture 4: Thomas Soeliner/ Shutterstock

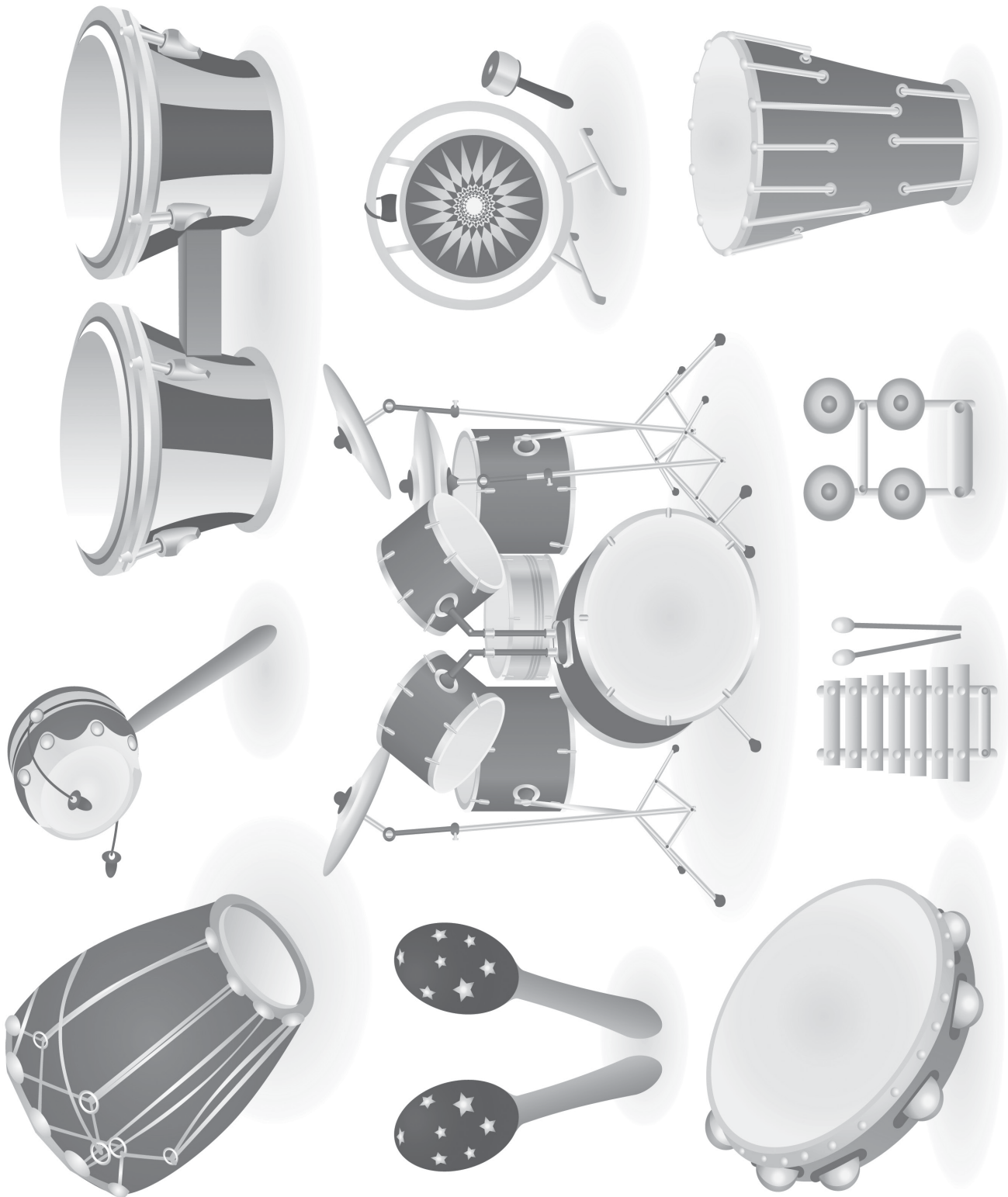
MOVEMENT AND MUSICAL INSTRUMENTS



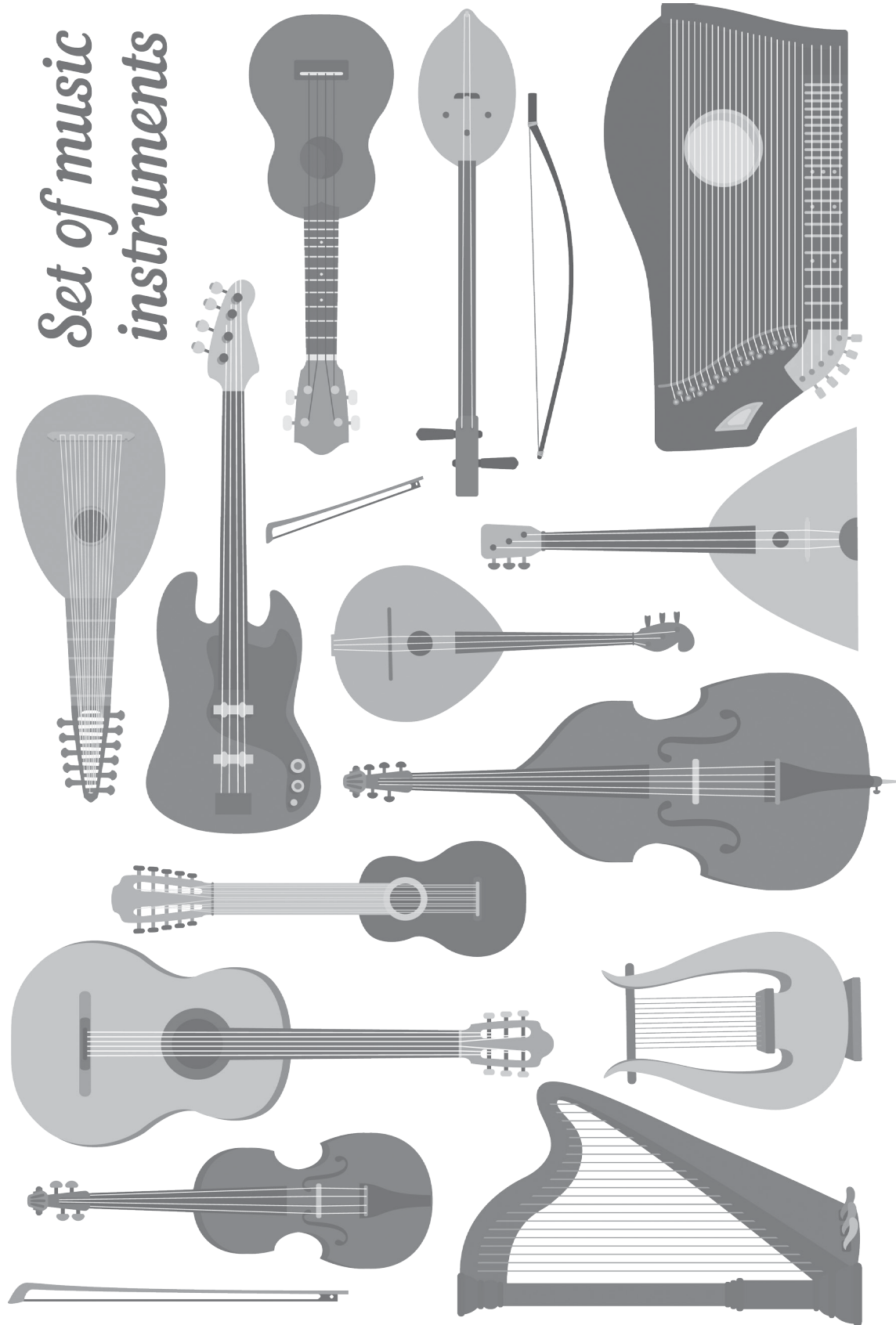
RESOURCE 14.1

Stock vector/ Shutterstock

TYPES OF INSTRUMENTS



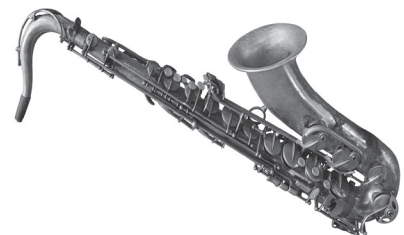
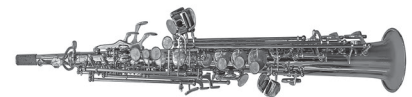
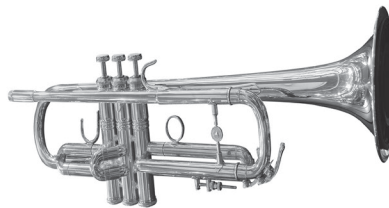
TYPES OF INSTRUMENTS



RESOURCE 14.3

Vereshchagin Dmitry/ Shutterstock

TYPES OF INSTRUMENTS



RESOURCE 15.1

Romaset/ Shutterstock

INSTRUMENT PARTS THAT MOVE OR VIBRATE



RESOURCE 15.2

Focal point/ Shutterstock

INSTRUMENT PARTS THAT MOVE OR VIBRATE



RESOURCE 15.3

Baishev/ Shutterstock

INSTRUMENT PARTS THAT MOVE OR VIBRATE



RESOURCE 15.4

AnnaTamil/ Shutterstock

INSTRUMENT PARTS THAT MOVE OR VIBRATE



RESOURCE 16.1

Ermess/ Shutterstock

INDIGENOUS AFRICAN MUSICAL INSTRUMENTS - Mbila or Marimba



RESOURCE 16.2

Dirk Ercken/ Shutterstock

INDIGENOUS AFRICAN MUSICAL INSTRUMENTS - Mbira or Kalimba



RESOURCE 16.3

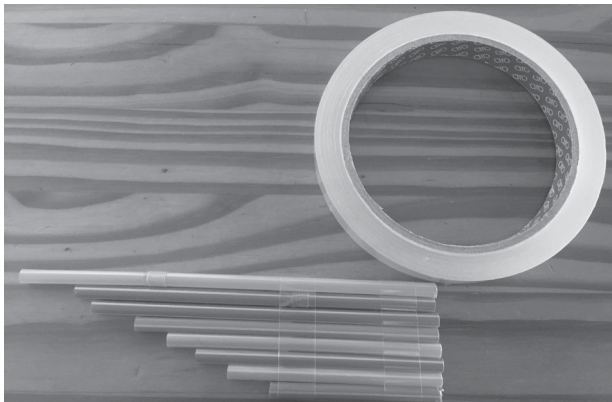
INDIGENOUS AFRICAN MUSICAL INSTRUMENTS



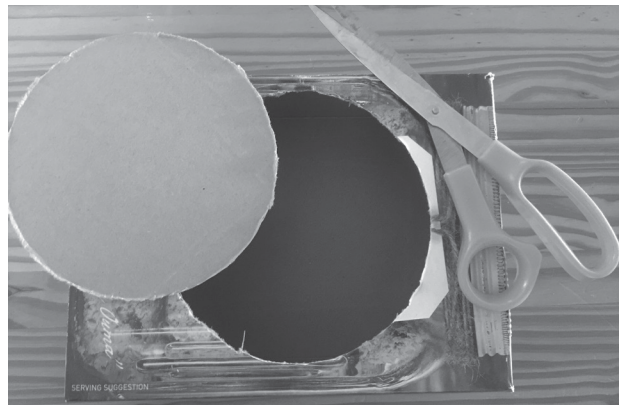
RESOURCE 17

Pictures: Jon Gunning – Own Collection
(Try to make a few copies of this page for your class)

MAKING A MUSICAL INSTRUMENT



Making a pan-pipe
from straws



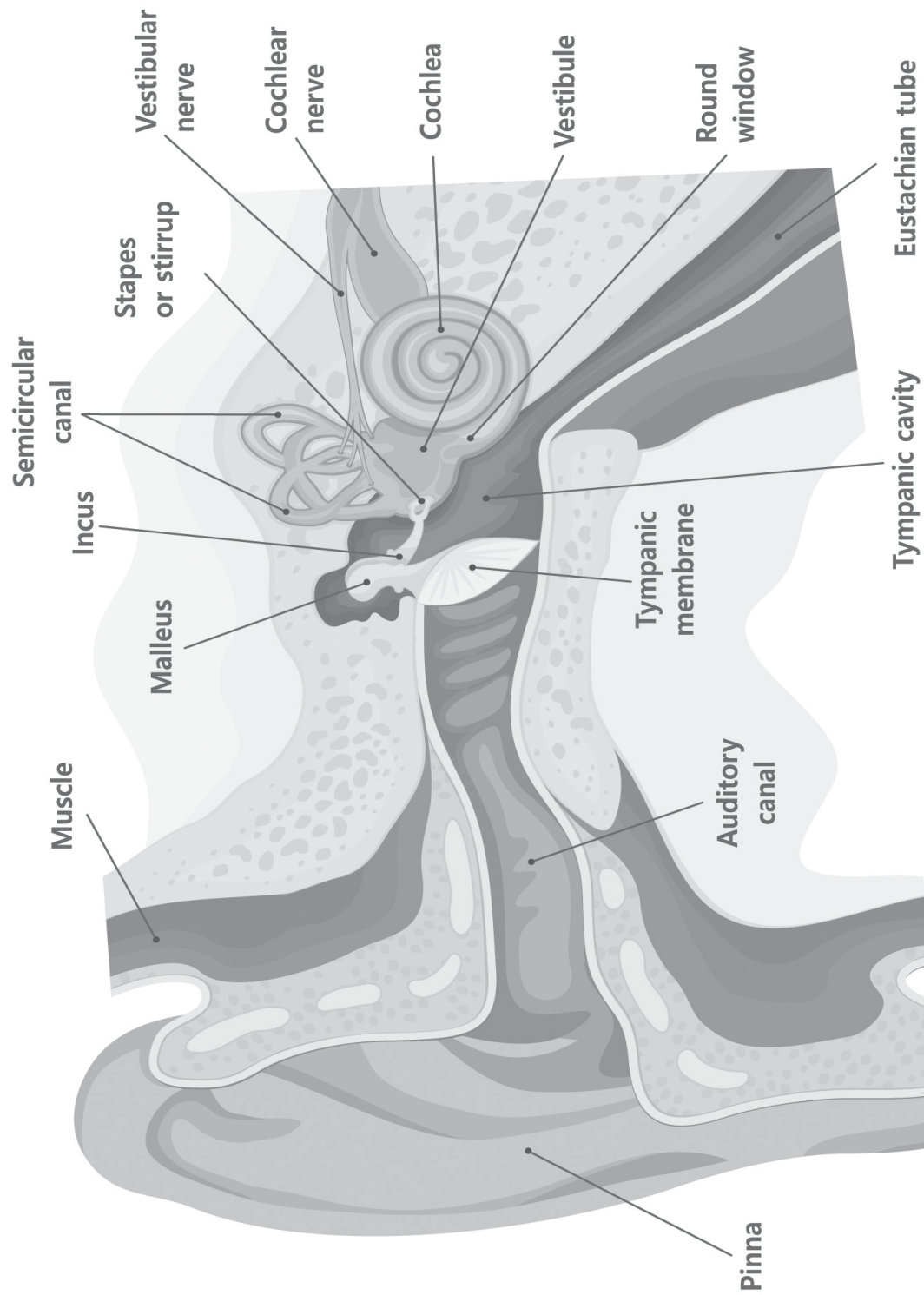
Making a box
strumming / plucking instrument



RESOURCE 18

Logika600/ Shutterstock

HEARING SOUNDS - The ear

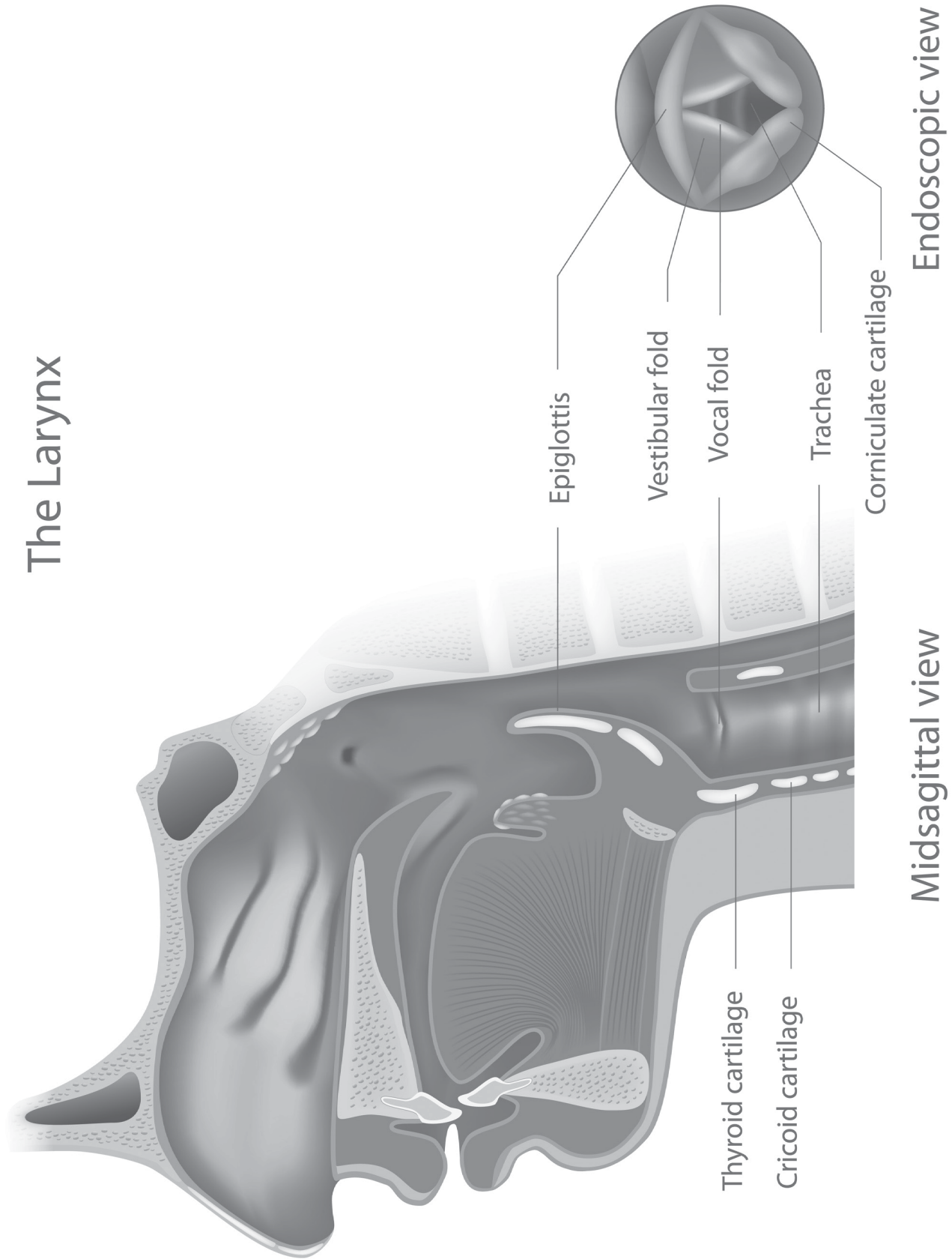


RESOURCE 19

Alila Medical Media/ Shutterstock

PINHOLE CAMERA - A view to see where the vocal cords are located.

The Larynx



RESOURCE 20.1

Michael Smith ATWP/ Shutterstock

SOUND VIBRATIONS THROUGH DIFFERENT MATERIALS - Whales swimming in the sea.
Whales can communicate over great distances.



RESOURCE 20.2

Cagi Stock/ Shutterstock

SOUND VIBRATIONS THROUGH DIFFERENT MATERIALS - Sound travels well through wood



RESOURCE 20.3

Designua/ Shutterstock

SOUND VIBRATIONS THROUGH DIFFERENT MATERIALS - A Tibetan singing bowl. The bowl is made of many different types of metal. When rubbed with a handle, the metals vibrate against each other to produce a melodic sound.



RESOURCE 21

Nevena Marjanovic/ Shutterstock

MAKING SOUNDS - VOLUME - A person turning up the volume on the television



RESOURCE 22

Ching Design/ Shutterstock

MAKING SOUNDS - PITCH - The sounds waves produced by a high-pitched sound and a low-pitched sound

Sound High-pitched



Sound Low key



RESOURCE 23

Arka38/ Shutterstock

NOISE POLLUTION - The effects of noise pollution on people

