

Insight Link L4

Background Link PPT



Additional Material Information

Lesson 1

https://www.sciencelearn.org.nz/image_maps/4-water-solid-liquid-and-gas<https://www.youtube.com/watch?v=xYU7RSoOZ0U>

→ State of Water

<https://www.youtube.com/watch?v=xYU7RSoOZ0U>

→ Change of state

Lesson 2

<https://www.youtube.com/watch?v=rI-90uuLDPk> (3:47~)

→ What If There Were No Rain for 50 Years?

Lesson 3

https://www.youtube.com/watch?v=AqpBzm_KcH0 (~1:00)

→ Chopin and George Sand in Valldemossa

Lesson 4

<https://www.youtube.com/watch?v=4HZ1TZ1PcDI>

→ First Umbrella Fashion Show (1956)

<https://www.youtube.com/watch?v=BcJCU7SBjUw>

→ Hand free umbrella Latest technology umbrella and raincoats for rainy season

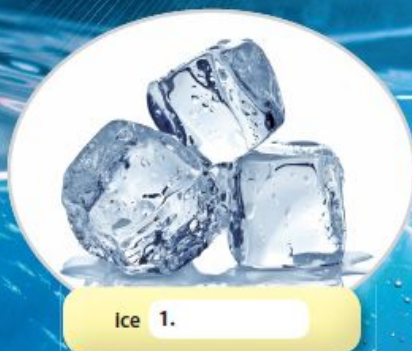


Where Does Rain Come From?



Background Link

Water has no taste, smell, or color. It can be in three different states depending on the temperature: solid, liquid, or gas. Write down each state of water in the blanks.



When water vapor cools down, it becomes a liquid. This is called **condensation**.

When water boils, it becomes a gas in the air. This is called **evaporation**.

losing heat
 gaining heat

Key Words

wonder	source	vapor
form	experiment	pour

Vocabulary Worksheet → p. 113

Answers: 1. solid 2. gas 3. liquid



Rainmaking Ceremonies



Background Link

What happens when there's no rain? Write the correct letter for each picture.

- a. Crops don't grow, and the land dries out.
- b. There is little water to drink or use.
- c. Wildfires can start more easily.
- d. Water levels get lower, so marine animals die.

Key Words

resource	perform	ceremony
spirit	pray	please

Vocabulary Worksheet → p. 114



Answers: 1.a 2.c 3.b 4.d



Chopin's Musical Raindrops



Background Link

Chopin was famous not only for his musical talents but also for his love story. What do you know about Chopin and his beloved George Sand?



Frédéric Chopin (1810–1849)

Chopin was born in Poland, but at the age of 21, he moved to Paris, France. He was a great composer and an excellent pianist.



George Sand (1804–1876)

Amantine Dupin was her real name, but she used "George Sand" as a pen name. Chopin loved her in his later years.

Key Words

accomplished	compose	suffer
damp	insist	imitate

Vocabulary Worksheet → p. 115



▲ Eugène Delacroix, *Portrait of Chopin and Sand*, 1838



▲ Josef Danhauser, *Franz Liszt Fantasizing at the Piano*, 1840

Which person in the bottom painting do you think is Sand? Surprisingly, she often dressed like a man.

Answer: b



The History of the Raincoat



Background Link

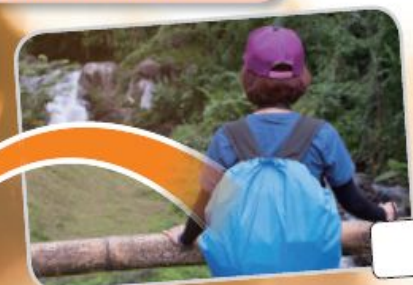
What do you use to avoid getting wet on a rainy day? Check what you use.



The first **waterproof umbrellas** were invented in ancient China.



The first **rain boots** made of rubber were created in France in the 19th century. They were mainly used by farmers.



A backpack **rain cover** keeps your backpack from getting wet.



You can keep your clothes dry when you wear a **raincoat**.

Key Words

waterproof	fabric	block out
stiff	weave	diverse

Vocabulary Worksheet → p. 116



Additional Material Information

Lesson 5

<https://www.youtube.com/watch?v=M0Jc4sP0BEE>

→ An Introduction to the Orchestra for Children

Lesson 6

<https://www.youtube.com/watch?v=96O82Uh5lQo>

→ Braille smartwatch for the visually impaired

Lesson 7

<https://www.youtube.com/watch?v=ai-IsikBfSo>

→ Australia Introduction Photo Story for Teachers

Lesson 8

https://www.youtube.com/watch?v=GCQE1U2EQ_4

→ How Color Blind People See the World



Staccato



Background Link

What kinds of musical instruments are there in an orchestra? Write the correct letter for each picture.

a. strings b. woodwinds c. brass d. percussion



1 You play them by drawing a bow across the strings.



2 You hit them with sticks or your hands to make the rhythm.



3 You blow air into a long narrow tube to make sound.



4 They are made of metal and have curved tubes with a bell-shaped end.

Key Words

mistake	symbol	press
lift	technique	repetitive

Vocabulary Worksheet → p. 117

Answers: 1 a 2 d 3 b 4 c



Reading by Touching



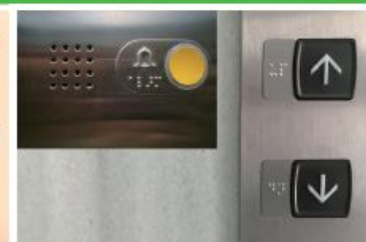
Background Link

Have you noticed special dots on sidewalks or on subway platforms? What do you think they are for?



Dotted blocks on sidewalks mean “stop” for the blind. Striped blocks mean “keep going.”

Dots on elevator buttons tell which button is for emergency calls and which ones are for going up or down.



Automated teller machines (ATMs) have dotted keypads.



Key Words (12)

infection	communication	similar
arrangement	publish	recognize

Vocabulary Worksheet → p. 118



The Dot Paintings of Aborigines



Background Link

Have you ever been to Australia? What do you know about the country?



Australia is a large island country in the southern part of the world. Its capital is Canberra.

Key Words (14)

native	theory	represent
temporary	encouragement	feature

Vocabulary Worksheet → p. 119



Kangaroos and koalas are unique to this country.



The Sydney Opera House and the Sydney Harbour Bridge are famous places to visit.



Native Australians have lived on this land for over 65,000 years. They are called *Aborigines*.





A Test for Your Eyes




Background Link

Some people can't see colors correctly. Write the correct letter for each picture.

- a.  **John Dalton (scientist)**
(1766–1844)
He could only see blue and yellow clearly.

- b.  **Claude Monet (artist)**
(1840–1926)
In his later days, he had eye problems.
The world looked blue to him.

- c.  **Neil Harbisson (artist)**
(1984–)
He sees things only in black and white.

Key Words

notice	vision	numerous
appear	common	difference

Vocabulary Worksheet → p. 120



Answers: 1. b 2. c 3. a



Additional Material Information

Lesson 9

https://www.youtube.com/watch?v=e3_hZVagQQA

→ What are the Olympics? (Educational Cartoon for Kids on the Olympics)

<https://www.youtube.com/watch?v=uSf7-LsmU3Y>

→ All About the Olympics for Kids - The History and Symbols of The Olympics

Lesson 10

<https://www.youtube.com/watch?v=LWOgCHT1Hr0>

→ Magnificent Frigatebird

<https://www.youtube.com/watch?v=zPcPk3OUUvI>

→ Peacock Love Call

https://www.youtube.com/watch?v=0NKlil_WJsk

→ Deer Fight

<https://www.youtube.com/watch?v=eDOo8SCE1jU>

→ Guppy's Different Mating Behaviors

Lesson 11

<https://www.youtube.com/watch?v=nbQp2qMHPeg>

→ Fauvism Works Overview

<https://www.youtube.com/watch?v=DSZMlfm1Ln0>

→ Cubism Works Overview

Lesson 12

<https://www.youtube.com/watch?v=iMzNPEHNxcc>

→ Olympian Goddesses of Ancient Greek Mythology



The Ancient Greek Olympics



Background Link

The Olympic Games are a sports competition for athletes from around the world. Have you ever watched the Olympic Games? What do you know about them? Fill in the blanks with the words from the box below.

four marathon Greece medals



In the modern Olympics, winners get **1.** . There are three different types according to place: gold, silver, and bronze.

Key Words (18)

originate worship remind
citizen compete participate

Vocabulary Worksheet → p. 121



The Olympic Games are held every **2.** years. The Summer Games and Winter Games alternate, and are two years apart.



The Olympic flame is lit in Olympia, **3.** . It's where the ancient Olympic Games began.



The **4.** comes from a story of an ancient Greek messenger. He ran from Marathon to Athens, in Greece, to announce the defeat of the Persian army.

Answers: 1. medals 2. four 3. Greece 4. marathon



Animals Compete to Attract Mates

Background Link

In the animal world, each species has its own way of attracting mates. What are some interesting ways that animals attract their partners?

A male peacock shows off his beautiful feathers.



A male frigatebird puffs out his bright red pouch. Females are attracted to males with larger pouch.



Male deer use their antlers to battle one another for females.



A male guppy dances with his long, beautiful tail.

Key Words

behavior	attract	prefer
show off	prove	poisonous

Vocabulary Worksheet → p. 122



Matisse and Picasso: Rivals and Friends

Background Link

In the early 20th century, modern artists tried new ways to change art. Two of the most famous movements were Fauvism and Cubism. Write F (Fauvism) or C (Cubism) for each painting on the right.



Fauvism

- They used strong and vivid colors.
- They painted images simpler than reality.
- Henri Matisse (1869–1954) was a famous fauvist.

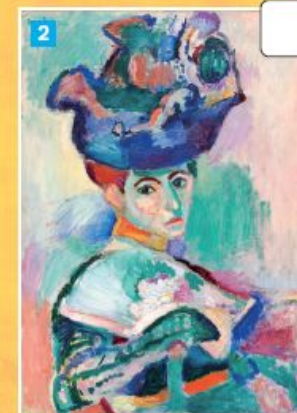


Cubism

- They broke a subject into many pieces. The pieces showed views from different angles.
- They painted objects in an abstract way.
- Pablo Picasso (1881–1973) was a popular cubist.



▲ *The Weeping Woman*, 1937



▲ *Woman with a Hat*, 1905



▲ *Music*, 1939



▲ *Girl before a Mirror*, 1932

Key Words (122)

include	passionate	abstract
motivate	defend	criticize

Vocabulary Worksheet → p. 123

Answers: 1. C 2. F 3. F 4. C

COMPETITION
12
Literature

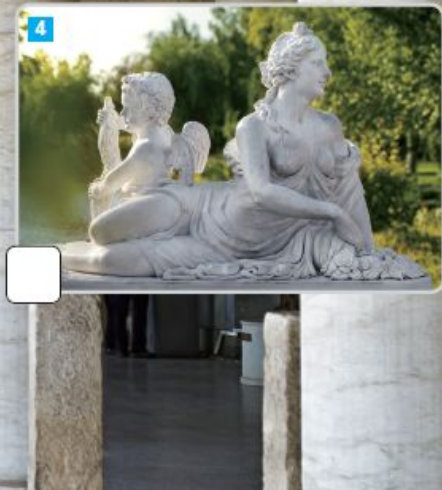
Arachne and Athena's Weaving Contest



Background Link

Ancient Greeks believed gods had control over different parts of people's lives. Write the correct letter in each picture.

- a. Athena was the goddess of war, wisdom, and weaving.
- b. Aphrodite was the goddess of love and beauty. She was also the mother of Eros.
- c. Artemis was the goddess of wildlife and hunting.
- d. Hera was the goddess of women, marriage, family, and childbirth.



Key Words (124)

brag	apologize	challenge
disguise	trick	furious

Vocabulary Worksheet → p. 124

Answers: 1. d 2. c 3. a 4. b



Additional Material Information

Lesson 13

<https://www.youtube.com/watch?v=IBLyLAGH9Bs>

→ How To Prepare and Launch Sky Lanterns

Lesson 14

<https://www.youtube.com/watch?v=3YSqTARkhBA>

→ Great Pacific Airshow 2018 (HB Airshow)

Lesson 15

<https://www.youtube.com/watch?v=lro2OT9yqBA>

→ The Gear Firefighters Wear

https://www.youtube.com/watch?v=iQ3W_1kjdPk

→ Top 5: New car safety innovations

Lesson 16

https://www.youtube.com/watch?v=t7Q7y_xjR5E

→ Air Pollution Video for Kids - Causes, Effects & Solution

<https://www.youtube.com/watch?v=sAKyhfxr7s>

→ Air Pollution for Kids



Air in Motion



Background Link

Air is a kind of gas. It moves all the time and in all directions. Let's talk about how air moves in three different situations.

Key Words (240)

invisible	constantly	stretch
swell up	shrink	expand

Vocabulary Worksheet → p. 125



Q1: Why do big balloons get small the next day?

A1: Air constantly moves out of the balloon through its surface.



Q2: How do you make a table tennis ball get its shape back?

A2: Putting it in hot water will make the ball round again.



Q3: How do Chinese sky lanterns fly?

A3: Air becomes more active when heating up and lifts the lanterns up.



Amazing Air Shows



Background Link

Is it fun to fly or be high in the air? If you could try one of the activities shown here, which one would you choose? Why?



hot-air ballooning



bungee jumping



skydiving



paragliding



hang gliding

Key Words (128)

display	vary	purpose
promote	worth	thrilling

Vocabulary Worksheet → p. 126



Life-Saving Airbags



Background Link

What happens when someone has a car accident without wearing a seatbelt? He or she is likely to get seriously injured. Look at each piece of safety equipment and talk about when and where to use it.

Key Words (30)

protect	crash	inventor
compressed	effective	detect

Vocabulary Worksheet → p. 127



helmet

knee pads



reflective vest



seat belt



oxygen mask



life jacket



The Growing Danger of Air Pollution



Background Link

Air pollution is gas, dust, and smoke floating in the air. Things that pollute the air are called *pollutants*. What human activities create pollutants?



Burning fossil fuels is one of the major causes of bad air. People use a lot of fuels to power their vehicles and to heat houses.



Construction activities, such as clearing land or paving roads, often create high levels of pollutants.



Factories and power plants release dangerous chemicals into the air.

Key Words (320)

particle	produce	comparison
lung	cause	deadly

Vocabulary Worksheet → p. 128