

STEAM READING HIGH ELEMENTARY 1 ANSWER KEY Student Book

Unit 1. Air Pressure Creates Wind

Warm-up

Yes, I do. / No, I don't.

Wind is made when air moves from areas of higher pressure to areas of lower pressure.

Key Words

B.

6, 8, 2, 5, 1, 3, 7, 4

Reading

C.

1. b
2. a

Check Your Understanding

A.

1. a
2. c
3. c

B.

1. F; Air is made of tiny particles that are always moving.
2. F; The air molecules in the smaller balloon are close together and cause high pressure.

C.

1. thick
2. Blow up
3. binder clip
4. Remove
5. higher
6. lower

D.

1. particles
2. tiny
3. blow up
4. thick
5. all the way
6. molecule

Steam Project

Step 1

- c. The water **stays in the bottle.**
- d. The water **comes out through the hole.**
- e. The water **comes out through the hole.**

Step 2

Air is all around us, and it pushes **down** on us. It pushes against the hole, so the water **stays inside** the bottle. When we take the cap off, air gets **into** the bottle, and it pushes the water **down**. The water comes out through the hole.

Unit 2. The Weather Forecast**Warm-up**

It is important to know the weather in advance so you can plan events and prepare ahead of time.

Key Words**B.**

2, 7, 5, 4, 1, 8, 3, 6

Reading**C.**

1. c
2. b

Check Your Understanding**A.**

1. b
2. c
3. c

B.

1. T
2. F; Lulu thinks learning about the weather in advance is good.

C.

Who: Lulu, her mom, (her dad)

What: Watching weather forecasts and knowing the weather in advance

Where: At home

When: Just before, when her dad called that the flight is canceled

Why: Heavy rain and wind are expected in the region where the flight was traveling from.

D.

1. expect
2. business trip
3. weather forecast
4. in advance
5. southern
6. region

Steam Project

Climate: b, d, h, i

Weather: a, c, e, f, g

Unit 3. How Does Heat Move Liquids?**Warm-up**

The hot water moves to the top and the cold water moves to the bottom until all of the water is boiling.

Key Words**B.**

3, 2, 8, 4, 1, 6, 5, 7

Reading**C.**

1. a
2. c

Check Your Understanding**A.**

1. a
2. c
3. c

B.

1. F; The food coloring starts moving up when it is heated.
2. T

C.

1. sinks
2. bottom
3. top
4. rises
5. Convection Currents

D.

1. support
2. kettle
3. finally
4. process
5. dropper
6. heat

Steam Project**Step 1**

The paper spiral **moves round and round**.

Step 2

The heat from the lamp's light heats up the air **above** the lamp. Hot air is **lighter** than cool air. When the air heats up, it rises above the lamp. **Colder** air moves down. It creates a convection current in the air. This causes the paper spiral to move round and round.

Unit 4. Water Moves Around the World**Warm-up**

No, the seawater at the poles is much colder than seawater in my country.

Key Words**B.**

7, 6, 4, 5, 2, 1, 3, 8

Reading**C.**

1. b
2. a

Check Your Understanding**A.**

1. a
2. c
3. c

B.

1. F; Tim felt that the water was cold when he put his foot in the water.
2. F; Seawater moves at 1 cm per hour.

C.

1. ✓
2. X
3. X
4. X
5. ✓
6. ✓

D.

1. equator
2. thousand
3. whole
4. circulation
5. seawater
6. circulate

Steam Project**Step 1**

Cold Seawater: around the North Pole, cold, dense

Warm Seawater: around the equator, light, moves up, warm

Step 2

1. Moving
2. sinks
3. warm water
4. heats

Unit 5. Growing Mushrooms**Warm-up**

Because when you eat moldy bread, you could inhale some of the mold spores which could cause breathing problems.

Key Words**B.**

3, 1, 7, 8, 5, 2, 6, 4

Reading**C.**

1. b
2. a

Check Your Understanding**A.**

1. b
2. a
3. b

B.

1. T
2. F; Mushrooms grow from spores carried by the wind.

C.

Plants: a, d

Fungi: b, c, e

D.

1. mold
2. alive
3. include
4. instructions
5. spores
6. nutrients

Steam Project**Step 1**

1. spores
2. germinated spores
3. mushroom spawn
4. pinhead
5. new mushroom
6. grown-up mushroom

Step 2

1. grown-up mushroom
2. spores
3. germinated spores
4. mushroom spawn
5. pinhead
6. new mushroom

Unit 6. I Am Not a Plant!**Warm-up**

Fungi do not need sunlight to grow, but plants do. Fungi grow from spores, but plants grow from seeds. Fungi do not have leaves, but plants do. Fungi get nutrients from other dead and living things while plants make their own food through photosynthesis.

Key Words**B.**

3, 4, 8, 2, 1, 7, 6, 5

Reading**C.**

1. a
2. c

Check Your Understanding**A.**

1. c
2. a
3. a

B.

1. F; A mushroom has a large cap and a long stalk.
2. F; Plants feed through the process of photosynthesis.

C.

1. photosynthesis
2. dead
3. reproduce
4. land
5. belong

D.

1. stalk
2. dead
3. photosynthesis
4. reproduce
5. gill
6. mushroom

Steam Project

1. antibiotics
2. grow
3. break down
4. nutrients
5. kill
6. deadly

Unit 7. Water Drops**Warm-up**

The paperclip floats.

Key Words**B.**

3, 6, 1, 8, 4, 2, 5, 7

Reading**C.**

1. c
2. b

Check Your Understanding**A.**

1. a
2. c
3. a

B.

1. F; Water can change between three states: solid, liquid, and gas.
2. T

C.

2, 1, 3, 4

D.

1. eventually
2. one at a time
3. counts
4. spill
5. pipette
6. states

Steam Project**Step 1**

- a. Yes, they do.
- b. No, they don't.

Step 2

The water molecules of the water in the bowl are pulled **together** equally. The molecules **on top** are pulled together more tightly because there are no water molecules above them. They form a sort of "skin," and we call this **surface tension**.

When we add liquid soap inside the triangle of toothpicks, we decrease the surface tension. The water molecules move, so the toothpicks move.

Unit 8. A Water Strider**Warm-up**

The detergent causes the surface tension to break.

Key Words**B.**

3, 1, 2, 6, 5, 4, 8, 7

Reading**C.**

1. b
2. a

Check Your Understanding**A.**

1. a
2. c
3. c

B.

1. F; The water strider's front two legs are short.
2. T

C.

1. ✓
2. ✓
3. X
4. X
5. X
6. ✓

D.

1. reservoir
2. pair
3. scientific
4. fine
5. water strider
6. look like

Steam Project**Step 1**

1. front legs
2. eyes
3. middle legs
4. back legs
5. antennae
6. head
7. body
8. wings

Step 2

1. body
2. eyes
3. front legs
4. antennae
5. middle legs
6. back legs
7. wings

Unit 9. Speed Racers**Warm-up**

We can know the speed of cars by knowing how long it takes them to travel a certain distance.

Key Words**B.**

7, 4, 1, 2, 5, 8, 6, 3

Reading**C.**

1. b
2. a

Check Your Understanding**A.**

1. a
2. b
3. b

B.

1. F; The person who finishes first in a race is the fastest runner.
2. T

C.

1. distance
2. race
3. far
4. tape measure
5. fans

D.

1. far
2. set
3. fan
4. distance
5. tape measure
6. vertical

Steam Project**Step 1**

1. sprint
2. ice hockey
3. F1
4. football (soccer)
5. speed skiing

Step 2

football (soccer) → ice hockey → sprint → speed skiing → F1

Unit 10. A Race to Grandfather's House**Warm-up**

I can run about 10 kilometers per hour.

Key Words**B.**

3, 6, 8, 5, 2, 1, 7, 4

Reading**C.**

1. a
2. a

Check Your Understanding**A.**

1. b
2. b
3. a

B.

1. F; Sally and her uncle left home at different times but arrived at the same time.
2. T

C.

Who: Sally and Uncle Pete

What: Velocity, and who traveled faster to get to Sally's grandfather's home

Where: At Sally's grandfather's home

When: At 10:00 a.m.

Why: Her car traveled in 80 km/h while Uncle Pete's car went in 70 km/h.

D.

1. arrive
2. win
3. kilometer
4. leave
5. divide by
6. find out

Steam Project**Step 1**

1. 130 kilometers
2. 3.5 hours
3. 261 kilometers
4. 115 kilometers
5. 16 kilometers

Unit 11. The Changing Volume of Gases**Steam Project****Warm-up**

You can smell some type of gases.

Step 1

The ball gets **bigger**. It **returns** to its original shape.

Key Words**B.**

3, 5, 2, 6, 7, 4, 1, 8

Step 2

1. crushed

2. volume

3. boiling

4. heat up

5. bigger

6. original

Reading**C.**

1. c

2. c

Check Your Understanding**A.**

1. b

2. a

3. a

B.

1. T

2. F; If you put a crushed table tennis ball in hot water, it will recover its original shape.

C.

1. flask

2. bigger

3. smaller

4. hot

5. bigger

D.

1. step on

2. return

3. knowledge

4. triangular

5. by mistake

6. original

Unit 12. Cold Air, Hot Air**Steam Project**

Gas volume increases: Hot air balloon, Tire

Gas volume decreases: Lung, Pool float

Warm-up

Yes, I used it to microwave leftovers.

Key Words**B.**

3, 7, 5, 4, 1, 8, 6, 2

Reading**C.**

1. b

2. b

Check Your Understanding**A.**

1. b

2. b

3. c

B.

1. F; Erica thinks mom's stew looks weird.

2. T

C.1. 

2. X

3. 4. 

5. X

6. X

D.

1. rotten

2. weird

3. curved

4. stew

5. take off

6. microwave

Unit 13. Stems Carry Water**Warm-up**

In that way, water can travel up the stem to the flowers so they can live longer.

Key Words**B.**

6, 8, 3, 5, 2, 4, 1, 7

Reading**C.**

1. b
2. a

Check Your Understanding**A.**

1. c
2. a
3. c

B.

1. F; Roots spread out under the ground and absorb water.
2. T

C.

1. roots
2. lily
3. horizontally
4. dots
5. stem

D.

1. wind
2. lily
3. dots
4. roots
5. appearance
6. horizontally

Steam Project**Step 1**

No, they don't.

Step 2

1. saltwater
2. sweet
3. stems
4. roots
5. vertically

Unit 14. Grandmother's Garden**Warm-up**

Yes, I have. When I went to the farm with my family last year, we picked carrots together.

Key Words**B.**

3, 5, 2, 4, 8, 7, 1, 6

Reading**C.**

1. b
2. b

Check Your Understanding**A.**

1. b
2. b
3. b

B.

1. T
2. F; Today, Brian is digging up some sweet potatoes for his grandmother's pie.

C.

1. tomato
2. upright stem
3. sweet potato
4. crawling stem (stolon)
5. strawberry
6. crawling stem (stolon)
7. morning glory
8. wrapping/winding stem

D.

1. sweet potato
2. morning glory
3. dig up
4. pie
5. upright
6. crawl

Steam Project**Step 1**

1. a
2. e
3. c
4. b
5. d

Unit 15. What's the Weather Like Today?**Warm-up**

I can find it by watching the forecast on television or searching for the Internet.

Key Words**B.**

6, 1, 2, 8, 4, 3, 5, 7

Reading**C.**

1. c
2. a

Check Your Understanding**A.**

1. b
2. b
3. c

B.

1. F; Meteorologists use weather balloons to record atmospheric pressure.
2. T

C.

1. Meteorologists
2. weather balloons
3. record
4. satellites
5. analyze

D.

1. report
2. record
3. meteorologist
4. analyze
5. information
6. weather balloon

Unit 16. Hydro Helpers**Steam Project****Warm-up**

The water I drink comes from a source of water deep in the ground.

Good: b, e, f, h, j

Bad: a, c, d, g, i

Key Words**B.**

8, 2, 6, 4, 1, 3, 5, 7

Reading**C.**

1. c

2. c

Check Your Understanding**A.**

1. a

2. a

3. b

B.

1. T

2. F; Hydrologists make sure every human on Earth has safe (clean) water to drink.

C.

1. hydrologists

2. contaminated

3. drink

4. groundwater

5. clean and safe

D.

1. hydrologist

2. rest

3. contaminated

4. life

5. keep

6. salty

Workbook**Unit 2. The Weather Forecast****Unit 1. Air Pressure Creates Wind****Vocabulary Practice****Vocabulary Practice****A.**

1. Can you blow up this balloon?
2. There are particles of dirt on your glasses.
3. She wears glasses with very thick lenses.
4. I bought some binder clips at the stationery store.

B.

1. b
2. a
3. b
4. c

Comprehension Practice

1. c
2. b
3. c

Summary

1. tiny
2. blow up
3. binder clip
4. half
5. remove
6. bigger
7. molecules

A.

1. business trip
2. expect
3. southern
4. canceled

B.

1. b
2. a
3. b
4. c

Comprehension Practice

1. c
2. c
3. b

Summary

1. weather forecast
2. pressure
3. sunshine
4. business trip
5. expected
6. canceled
7. in advance

Unit 3. How Does Heat Move Liquids?**Vocabulary Practice****A.**

1. Heat the pan until the oil is hot.
2. After driving around for 3 hours, they finally reached their destination.
3. The wire supports the cherry tomatoes.
4. I need a dropper to let out the drops of liquid.

B.

1. b
2. c
3. a
4. c

Comprehension Practice

1. c
2. c
3. a

Summary

1. kettle
2. dropper
3. hot
4. under
5. heats
6. convection
7. process

Unit 4. Water Moves Around the World**Vocabulary Practice****A.**

1. equator
2. seawater
3. thousand
4. whole

B.

1. c
2. a
3. b
4. b

Comprehension Practice

1. c
2. a
3. b

Summary

1. equator
2. circulation
3. sinks
4. circulates
5. per
6. takes
7. thousand

Unit 5. Growing Mushrooms**Vocabulary Practice****A.**

1. The mushroom releases spores which are carried away by the wind.
2. Some plants are still alive after forest fires.
3. He needs clear instructions on what to do next.
4. The bill includes tax and service.

B.

1. b
2. a
3. b
4. c

Comprehension Practice

1. a
2. c
3. b

Summary

1. fungi
2. mold
3. humid
4. dark
5. instructions
6. includes
7. spawn

Unit 6. I Am Not a Plant!**Vocabulary Practice****A.**

1. mushrooms
2. Photosynthesis
3. reproduce
4. landed

B.

1. c
2. a
3. b
4. c

Comprehension Practice

1. c
2. b
3. c

Summary

1. wide
2. stalk
3. plant
4. humid
5. reproduce
6. gills
7. land

Unit 7. Water Drops**Vocabulary Practice****A.**

1. The scientist uses a pipette to pour drops of liquids.
2. She spilled the coffee all over her shirt.
3. The old house was in a bad state.
4. He ate the peas on his plate one at a time.

B.

1. b
2. c
3. a
4. c

Comprehension Practice

1. c
2. b
3. a

Summary

1. liquid
2. penny
3. pipette
4. stays
5. spills
6. surface tension
7. eventually

Unit 8. A Water Strider**Vocabulary Practice****A.**

1. reservoir
2. scientific
3. water striders
4. fine

B.

1. c
2. a
3. b
4. c

Comprehension Practice

1. c
2. b
3. b

Summary

1. water strider
2. reservoirs
3. bodies
4. sticks
5. scientific
6. surface tension
7. weight

Unit 9. Speed Racers**Vocabulary Practice****A.**

1. We should bring a tape measure to measure the size.
2. The cliff was almost vertical.
3. He is using a fan to cool down.
4. Is it within walking distance?

B.

1. b
2. a
3. b
4. c

Comprehension Practice

1. c
2. c
3. b

Summary

1. compare
2. distance
3. same
4. far
5. starting line
6. fan
7. farthest

Unit 10. A Race to Grandfather's House**Vocabulary Practice****A.**

1. divided by
2. arrive
3. wins
4. kilometers

B.

1. a
2. b
3. a
4. c

Comprehension Practice

1. c
2. c
3. c

Summary

1. arrive
2. leave
3. find out
4. explains
5. velocity
6. distance
7. traveled

Unit 11. The Changing Volume of Gases**Vocabulary Practice****A.**

1. I bought a new rug with some triangular patterns on it.
2. Working in a restaurant gave Jenny a good knowledge of cooking.
3. The original owner of our car had it for 5 years.
4. I'm sorry. Did I step on your foot?

B.

1. b
2. c
3. a
4. c

Comprehension Practice

1. c
2. b
3. a

Summary

1. step on
2. crush
3. flask
4. expand
5. return
6. original
7. knowledge

Unit 12. Cold Air, Hot Air**Vocabulary Practice****A.**

1. stew
2. rotten
3. weird
4. microwave

B.

1. c
2. a
3. b
4. a

Comprehension Practice

1. c
2. a
3. c

Summary

1. stew
2. fridge
3. plastic wrap
4. downward
5. rotten
6. upward
7. take off

Unit 13. Stems Carry Water**Vocabulary Practice****A.**

1. She is winding the wool into a ball.
2. Pine trees have deep roots.
3. Matthew put some lilies in a vase.
4. Slice the wood in half horizontally.

B.

1. b
2. a
3. b
4. c

Comprehension Practice

1. c
2. b
3. c

Summary

1. roots
2. stem
3. Leave
4. cut
5. dots
6. vertically
7. wind

Unit 14. Grandmother's Garden**Vocabulary Practice****A.**

1. dig up
2. sweet potatoes
3. morning glories
4. pie

B.

1. a
2. b
3. a
4. c

Comprehension Practice

1. c
2. b
3. b

Summary

1. garden
2. dig up
3. stems
4. upright
5. crawl
6. stolon
7. different

Unit 15. What's the Weather Like Today?**Vocabulary Practice****A.**

1. A weather balloon explodes at about 100,000 feet in altitude.
2. A meteorologist has predicted heavy rains for the next few days.
3. The book contains a lot of useful information.
4. A new report shows that violent crime is on the rise.

B.

1. a
2. a
3. c
4. a

Comprehension Practice

1. b
2. a
3. c

Summary

1. weather forecast
2. predict
3. meteorologists
4. weather balloons
5. pressure
6. satellites
7. analyze

Unit 16. Hydro Helpers**Vocabulary Practice****A.**

1. salty
2. rest
3. hydrologist
4. contaminated

B.

1. c
2. b
3. a
4. c

Comprehension Practice

1. c
2. c
3. c

Summary

1. fresh water
2. rest
3. protect
4. hydrologists
5. contaminated
6. groundwater
7. make sure