PROJECT
I-WORK

7

INTERACTIVE WORKBOOK

Let's read!

DIVING

Humans do not have the capacity to breathe underwater unaided by external devices. A diver who wants to stay underwater for more than a few minutes must breathe air on a special mixture of gasses. He can wear diving suits and have air pumped to him from above or he can carry tanks of air on his back and breathe through a hose and a mouthpiece.

Early divers discovered that it is not enough to supply air to breathe comfortably underwater. The diver's body is under great pressure in deep water because water weighs 800 times as much as air. Tons of water push against the diver deep in the sea. When this happens, his blood takes in some of the gasses he breathes.

When the diver rises to the surface, the water pressure becomes less. If he rises too quickly, the gasses in his blood form bubbles that make breathing difficult. He suffers from bends, causing him to double up in pain.

INSTANT DEFINITION

Search for the meaning of the unfamiliar word/s you encounter

https://www.merriam-webster.com/

WATCH & LEARN!

HEAR IT!

Click these words to know their proper pronunciation!

capacity unaided external

surface pressure diving suits

discovered mixture bends

devices

Comprehension Exercises

Directions: Match the vocabulary words in the Column A with their definitions in Column B.

A	B
1. Capacity	**A.** Without help or support.
2. Unaided	**B.** The outermost layer or top of something.
3. External	**C.** A combination of different substances.
4. Surface	**D.** Tools or equipment made for a particular purpose.
5. Pressure	**E.** Specialized clothing for underwater activities.
6. Diving suits	**F.** The ability or power to do something.
7. Discovered	**G.** Located on or coming from outside.
8. Bends	**H.** Found out or became aware of something.
9. Mixture	**I.** The force exerted on an object by something in contact with it.
10. Devices	**J.** A condition causing pain due to rapid changes in pressure.

Comprehension Exercises

Directions: The following questions are based on the given passage. Read each question carefully and put a check (/) mark inside the box of the correct answer.

1. What is required for a diver to stay underwater for an extended period?
   - A wetsuit with weights
   - A special mixture of gases
   - A life jacket
   - A boat nearby

2. Why does a diver's blood absorb gases while underwater?
   - The diver breathes too quickly.
   - The water pressure pushes gases into the blood.
   - The diver's equipment fails.
   - The diver's body produces extra gases.

3. What happens to water pressure as a diver rises to the surface?
   - It increases steadily.
   - It remains the same.
   - It becomes less.
   - It doubles.

4. What is the condition called when a diver rises too quickly, causing bubbles in the blood?
   - Hyperthermia
   - Bends
   - Hypoxia
   - Asphyxiation

5. Why is water pressure dangerous for divers at great depths?
   - It causes the water to boil.
   - It makes breathing impossible.
   - It is 800 times greater than air pressure and affects the body.
   - It prevents the diver from moving.

Comprehension Exercises

Directions: Read each statement carefully. Then, identify whether the given statement is TRUE or FALSE. Write a big letter "T" if it is true, and a big letter "F" if it is false.

_____1. Modern diving suits are designed to protect divers from the high pressure of deep water.

_____2. If a diver's air supply runs out, they can survive underwater for hours without assistance.

_____3. Knowledge of water pressure is essential for designing safe underwater exploration equipment.

_____4. Divers can avoid dangerous bubbles forming in their blood by ascending slowly to the surface.

_____5. A diver's blood absorbs gases faster in shallow water than in deep water.

CONGRATULATIONS!

Workbook #3 COMPLETE!