WATER PROPERTIES WORKSHEET

Name ___________________________ Date_____________________

1. Why do scientists study the ocean? List two reasons.
   1. ______________________________________
   2. ______________________________________

2. How do scientists explore the ocean? (opinion)
   ______________________________________________________________

3. Why is it important to study our oceans? (opinion)
   ______________________________________________________________

4. Describe what life is like under the water. List three characteristics.
   1. ______________________________________
   2. ______________________________________
   3. ______________________________________

5. What is density?
   ______________________________________________________________
   ______________________________________________________________

6. What is pressure?
   ______________________________________________________________
   ______________________________________________________________

7. What is buoyancy?
   ______________________________________________________________
   ______________________________________________________________
### WATER PROPERTIES VOCABULARY

**Name:** ____________________________ **Date:** ____________________

**Directions:** Match the definition with the correct vocabulary word by placing the number on the line before the word.

1. How much "stuff" is in a certain amount of "space." ______ **negative buoyancy**

2. The force or push of water on something. ______ **neutral buoyancy**

3. The ability for something to float in air/water. ______ **density**

4. The weight of the object is **less** than the weight of the water displaced. ______ **pressure**

5. The weight of the object is **more** than the weight of the water displaced. ______ **buoyancy**

6. The weight of the object is the **same** as the weight of the water displaced. ______ **positive buoyancy**
1. How can we explore the ocean? List three ways.
   1. ________________________________
   2. ________________________________
   3. ________________________________

2. Where is the Mariana Trench? What is so special about it?
   ______________________________________________________________
   ______________________________________________________________

3. What do the letters ROV stand for?
   ______________________________________________________________

4. What do the letters AUV stand for?
   ______________________________________________________________

5. List two ways SONAR’s help explore the ocean.
   ______________________________________________________________
   ______________________________________________________________

6. Putting it all together. Why do you think we need many different pieces of technology to study the ocean?
   ______________________________________________________________
   ______________________________________________________________
   ______________________________________________________________
   ______________________________________________________________
OCEAN TECHNOLOGY VOCABULARY

Name: ______________________________ Date: _________________________

Directions: Match the definition with the correct vocabulary word by placing the number on the line before the word.

1. Deepest part of the earth's ocean. 
   _____ satellites

2. The first submersibles. 
   _____ passive sonar

3. A vehicle preprogrammed for navigation & data collection. 
   _____ hydrophone

4. Submarine. 
   _____ ADCP
   Acoustic Doppler Current Profiler.

5. Tethered underwater robots operated from a support ship. 
   _____ Mariana's Trench

6. Tool used to find objects in water. 
   _____ diving bell

7. Send out signal. 
   _____ drifters

8. Listen for signal. 
   _____ AUV 
   Autonomous Underwater Vehicle

9. Measures speed and direction of ocean currents. 
   _____ submersible

10. A tool used to measure surface currents. 
    _____ active sonar

11. Orbits around the earth and measures atmosphere, land, and water. 
    _____ SONAR
    Sound Navigation and Ranging

12. Acoustic monitoring for marine mammals and ocean volcanoes. 
    _____ CTD

13. A tool used for scientists to measure conductivity (salinity), temperature, and density. A vertical profile. 
    _____ ROV
    Remotely Operated Vehicle

14. The flow visualization is based on the deflection of light by a reflective index gradient. The index gradient is directly related to flow density gradient. 
    _____ brackish

15. Water that has more salinity than fresh water, but not as much as seawater. It may result from mixing of seawater with fresh water. 
    _____ schlieren