

Name: \_\_\_\_\_

Class: \_\_\_\_\_

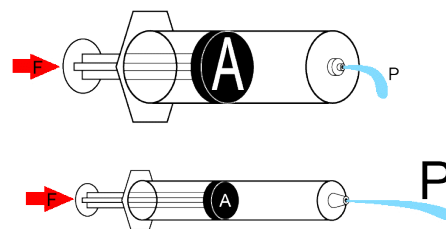
## FLUIDS END OF UNIT REVIEW

Complete each of the following tasks. Check it off once you have done so.

- Review all of the definitions posted on the Fluids webpage.
- Practise the calibration and proper use of a triple beam balance.
- Review your Fluids Math worksheet, and the answer key posted online.

Answer each of the questions to follow on a separate piece of paper. Be sure to have your answers complete by the assigned due date, so that you may take part in the take-up of the review.

1. What are the three main states of matter? Provide dot jot information to differentiate the three and draw a quick sketch to show some of the differences.
2. Write out the three postulates from the particle theory of matter that most affect the concepts we have discussed this unit. Underline one key word from each.
3. Explain in your own words what viscosity is. In your explanation, name two fluids, one that has high viscosity and one that has low viscosity.
4. Name an industry in which viscosity is important. Provide two specific examples (from that industry), and explain how viscosity is important to them.
5. How does temperature affect the viscosity of a gas? Of a liquid?
6. Explain in your own words what density is. In your explanation, name two fluids, one that has high density and one that has low density.
7. Explain the relationship between density and the states of matter.
8. Write a procedure for how you would determine the density of an unknown object.
9. What is Archimedes' principle? Explain how it rationalizes the ability of a boat to float.
10. With the use of force balance diagrams, explain why an object floats and why an object sinks.
11. In dot-jots, explain why a straw and a ball of Play-Doh can function as a hydrometer.
12. In the diagram provided, the water is coming out differently with the same force. Explain why.
13. What is Pascal's Law? Explain how this relates to hydraulics and pneumatics.
14. Compare the compressibility of liquids and gases. Be sure to reference the particle theory.
15. Your circulatory system is hydraulic. Explain.
16. Explain the relationship between pressure and temperature and pressure and volume.
17. Name three examples of environmental impacts from fluid related technology.



The questions above are not the test questions, they are a review of all of the main concepts we have learned in this unit. If you are able to answer these questions, then you are in good shape to be able to complete your test.

This sheet is due: \_\_\_\_\_