



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Physical Science

Class: 8

Date: 15.02.21

Duration: 40 min

Worksheet 10

Full Marks: 15

PHYSICAL QUANTITIES AND MEASUREMENT/ COMPARISON OF DENSITIES, CONVECTION CURRENT, LAND AND SEA BREEZE

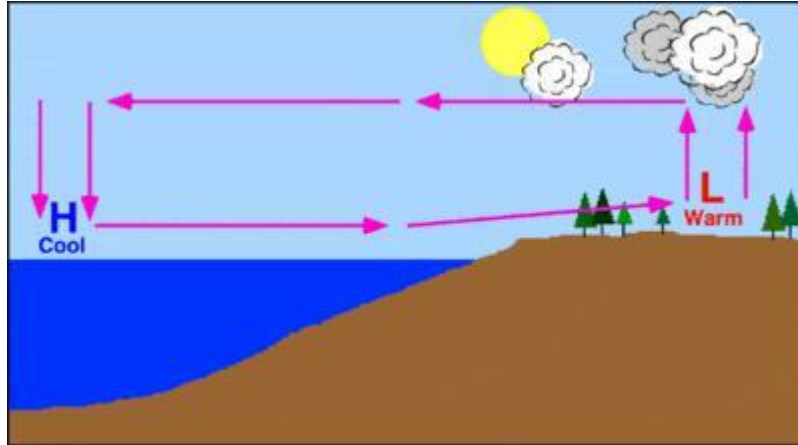
Choose the Correct options:

- Cool air is _____.
 - less dense than warm air
 - more dense than warm air
 - equally dense
 - does not vary in density
- What causes warm air to rise?
 - warm air is less dense than cold air
 - warm air weighs more than cold air
 - warm air has higher pressure than cold air
 - warm air is more dense than cold air
- Cool air sinking creates areas of _____ pressure underneath the sinking air.
 - high
 - low
 - equal
 - none of these
- Warm air rising creates areas of _____ pressure underneath the rising air.
 - high
 - low
 - equal
 - none of these
- Is this a land or a sea breeze?



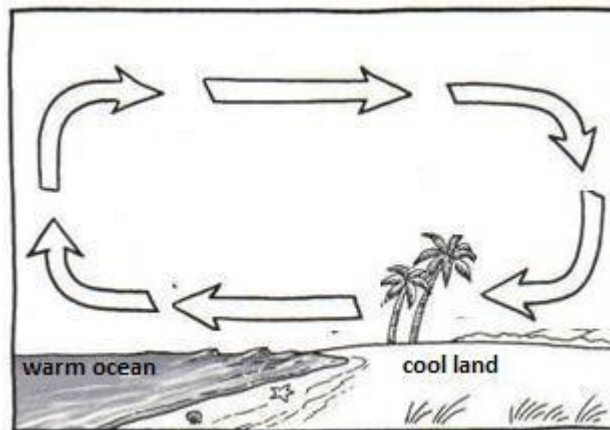
- land breeze
- sea breeze
- Both of these
- None of these

6. Is this a land or a sea breeze?

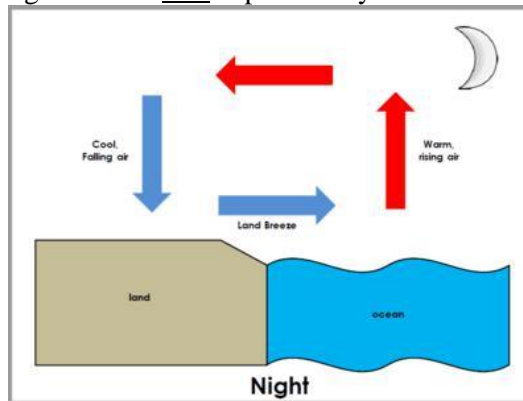


- a) land breeze
 - b) sea breeze
 - c) Both of these
 - d) None of these
7. What causes cold air to sink?
- a) it's less dense than warm air
 - b) it weighs more than warm air
 - c) it has higher pressure than warm air
 - d) it's more dense than warm air
8. Land heats and cools faster than water, causing wind and weather.
- a) True
 - b) False
 - c) Depends on other factors
 - d) None of these
9. Wind travels from areas of ____ pressure to areas of ____ pressure.
- a) low >> high
 - b) high >> low
 - c) does not depend on pressure
 - d) none of these
10. What causes wind?
- a) differences in air pressure
 - b) differences in oxygen levels
 - c) differences in gravity
 - d) none of these
11. Which statement correctly describes the properties of cold air?
- a) less dense and forms areas of low pressure as it rises
 - b) more dense and forms areas of high pressure as it sinks
 - c) more dense and forms areas of low pressure as it sinks
 - d) less dense and forms areas of high pressure as it rises

12. What kind of breeze is this and when would it form?



- a) Land breeze – day time
 - b) Land breeze – night time
 - c) Sea breeze – day time
 - d) Sea breeze – night time
13. Land breezes form at night. Which best explains why?



- a) Land cools off slower than water, so the air above water is cooler.
 - b) Water cools off faster than land, so the air above land is warmer.
 - c) Land heats up slower than water, so the air stays cooler during the day.
 - d) Water cools off slower than land, so the air above water is warmer.
14. What causes convection currents in the atmosphere?
- a) the waves of the ocean
 - b) unequal heating of Earth's surface
 - c) tides rising and falling
 - d) the rotation of the Earth
15. When warm air rises, cools, sinks, and then repeats this cycle, this is known as a _____.
- a) radiation current
 - b) convection current
 - c) conduction current
 - d) ocean current