



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Physical Science

Class: 8

Date: 24.04.20

Duration: 40 min

Worksheet Solution16

Full Marks: 15

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

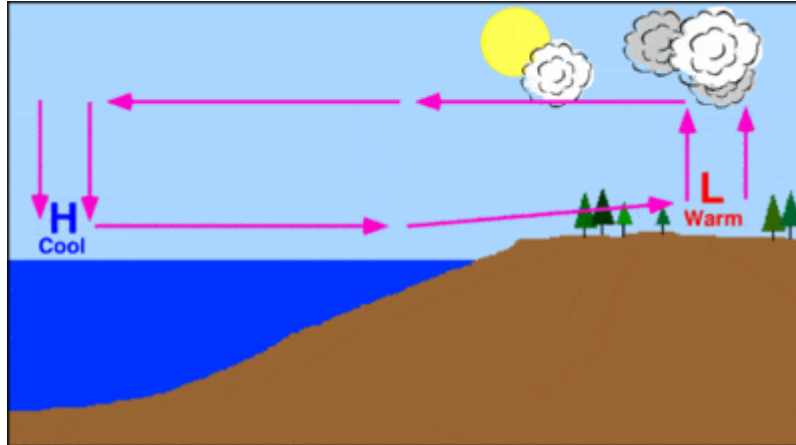
### Choose the Correct options:

- 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?



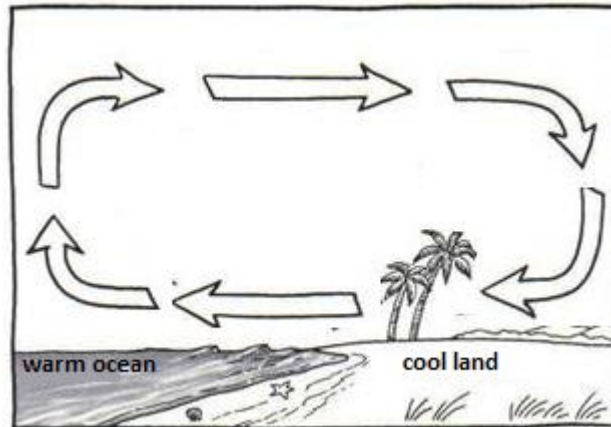
- land breeze**
- sea breeze
- Both of these
- None of these

6. Is this a land or a sea breeze?

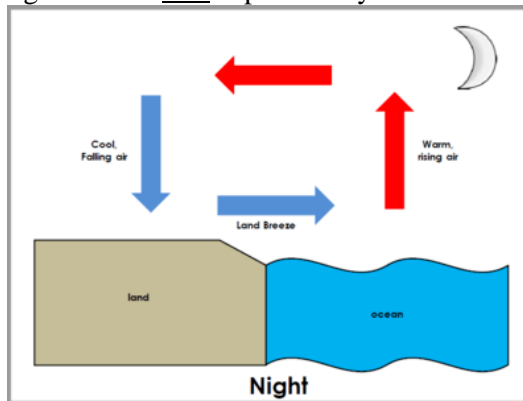


- a) land breeze
  - b) sea breeze**
  - c) Both of these
  - d) None of these
7. What causes warm air to rise?
- a) it's less dense than cold air**
  - b) it weighs more than cold air
  - c) it has higher pressure than cold air
  - d) it's more dense than cold air
8. Land heats and cools faster than 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