

Unit 4 Quiz

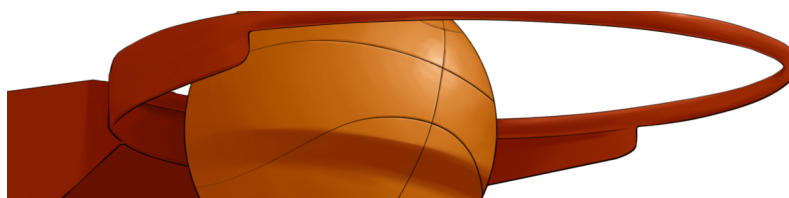
Due No due date
Allowed attempts 2

Points 20

Questions 20

Time limit None

Instructions



Before you begin working on this assignment, please read this information:

- Unit quizzes **do** count toward your course grade.
- Double-check your work before submitting the assignment.
- You can save your work and continue later, if you need to.
- The assignment is **open book**—you can refer back to the lesson material to find answers.

Attempt history

	Attempt	Time	Score
KEPT	Attempt 2	6 minutes	15 out of 20
LATEST	Attempt 2	6 minutes	15 out of 20
	Attempt 1	91 minutes	14 out of 20

⚠ Correct answers are hidden.

Score for this attempt: **15** out of 20

Submitted 3 Apr 2019 at 13:02

This attempt took 6 minutes.

Question 1

1 / 1 pts

Find the density of a rock that has a mass of 40 g and a volume of 20.5 cm³.

☐ 820 g/ cm³

☐ 2 g/ cm³

☐ 0.51 b/ cm³

☒ 1.95 g/cm³

☐ 40 g/ cm³

Question 2

1 / 1 pts

Convert 75°F into Celsius.

☐ 297°C

☐ 59.4°C

☒ 23.9 °C

☐ 41.7°C

☐ 77.4°C

Question 3

1 / 1 pts

Convert 280 K into Fahrenheit.

- ☒ 45°F
- ☐ 963°F
- ☐ -177.2°F
- ☐ 410.56°F
- ☐ 7°F

Question 4**1 / 1 pts**

Find the volume of a sphere that has a radius of 2 cm.

- ☐ 8 cm³
- ☐ 61.2 cm³
- ☒ 33.5 cm³
- ☐ 25 cm³
- ☐ 12.6 cm³

Question 5**1 / 1 pts**

Find the volume of a cylinder with a radius of 10 cm and a height of 10 cm.

- ☐ 1000 cm³
- ☒ 3140 cm³

☐ 31.4 cm³☐ 100 cm³☐ 314 cm³**Question 6****1 / 1 pts****Find the volume of a box that measures 4 cm by 16 cm by 20 cm.**☐ 640 cm³☒ 1280 cm³☐ 40 cm³☐ 320 cm³☐ 3200 cm³**Question 7****1 / 1 pts****Which one of the main states of matter is characterized as having the most loosely held particles?**☐ liquid☒ gas☐ plasma☐ solid

Question 8**1 / 1 pts**

Which one of the main states of matter always maintains its shape and volume?

☒ solid

☐ liquid

☐ gas

☐ water

Incorrect**Question 9****0 / 1 pts**

What is the process by which a gas becomes a solid without becoming a liquid first?

☐ deposition

☒ vaporization

☐ sublimation

☐ condensation

☐ evaporation

The question asked about a gas becoming a solid. You may want to revisit the material from lesson 2.

Question 10**1 / 1 pts**

A pot of boiling water on the stove is slowly releasing steam. Which process is this an example of?

☐ vaporization

☒ evaporation

☐ sublimation

☐ deposition

☐ condensation

Question 11**1 / 1 pts**

What is the process by which a gas becomes a liquid?

☒ condensation

☐ vaporization

☐ deposition

☐ evaporation

☐ sublimation

Question 12**1 / 1 pts**

Sensible heat involves a change in which aspect of a substance?

☐ its condensation

☒ its temperature

☐ its vaporization

☐ its state

Incorrect**Question 13****0 / 1 pts**

How much heat must be transferred for 5 g of ice at 0°C to become liquid water? Is it absorbed or released?

☒ 80 calories released

It appears that you found the amount of heat that would need to be transferred to 1 gram of ice, instead of to 5 grams of ice. Also, this heat must be absorbed, not released. Please review table 4.2 from lesson 3. You can also get more help with change of state questions in the unit 4 folder in the virtual practice lab. Check out problems 7 and 8.

☐ 80 calories absorbed

☐ 400 calories released

☐ 400 calories absorbed

Incorrect

Question 14

0 / 1 pts

How much heat must be transferred for 10 g of liquid water at 0°C to become ice? Is it absorbed or released?

☒ 800 calories absorbed

You did find the correct amount of heat that must be transferred, but this heat must be released, not absorbed. Please review table 4.2 from lesson 3. You can also get more help with change of state questions in the unit 4 folder in the virtual practice lab. Check out problems 7 and 8.

☐ 800 calories released

☐ 80 calories released

☐ 80 calories absorbed

Incorrect

Question 15

0 / 1 pts

Is heat absorbed or released during freezing?

☒ absorbed

☐ released

Heat must be released from a liquid for freezing to occur. Please revisit the material from lesson 3.

Incorrect**Question 16****0 / 1 pts**

Is heat absorbed or released during vaporization?

☐ absorbed

☒ released

Heat must be absorbed by a liquid for vaporization to occur. Please revisit the material from lesson 3.

Question 17**1 / 1 pts**

A piece of copper is measured to be at 10°C and 115 grams in mass. If 1300 calories were added to it, what was the final temperature of the copper?

☐ 386.8°C

☐ 125.6°C

☐ 21.3°C

☐ 103.5°C

☒ 135.6°C

Question 18**1 / 1 pts**

The temperature of 5 liters of argon gas is 300 K. If we change the temperature to 350 K, what will the resulting volume be?

☐ 6.11 liters

☐ 2.94 liters

☐ 4.29 liters

☒ 5.83 liters

☐ 3.77 liters

Question 19**1 / 1 pts**

Air in a certain container has a pressure of 0.00035 Pa at a temperature of 297 K. If we change the temperature to 317 K, what will be the pressure?

☐ 0.000328 Pa

☒ 0.000374 Pa

☐ 0.000302 Pa

☐ 0.000334 Pa

☐ 0.000386 Pa

Question 20**1 / 1 pts**

The pressure of 6 liters of nitrogen gas is 0.00002 Pa. If we change the pressure to 0.00003 Pa, what will the resulting volume be?

☐ 0.111 liters

☐ 0.25 liters

☐ 9 liters

☒ 4 liters

☐ 6 liters

Quiz score: **15** out of 20