

**\*\*99 POINTS\*\* I WILL GIVE BRAINLIEST ANSWER! EXPLAIN ANSWER!**

**A squirrel sees a BIG acorn being thrown from a tree by a chipmunk and attempts to snatch it. The acorn is thrown from a 10.0 m high branch and with a horizontal velocity of 1.1 m/s. The squirrel on the ground is 5.0 m from the base of the tree. What is the of the squirrel's average velocity if it grabs the acorn in its mouth just as it touches the ground?**

Since the acorn is thrown horizontally, the initial vertical velocity is 0 m/s. Let's use the following equation to determine the time to fall 10 meters.

$$d = v_i * t + \frac{1}{2} * a * t^2, v_i = 0, a = 9.8$$

$$10 = 4.9 * t^2$$

$$t = \sqrt{10/4.9}$$

This is approximately 1.43 seconds. Let's use the following equation to determine the horizontal distance it moves.

$$d = v * t = 1.1 * \sqrt{10/4.9}$$

This is approximately 1.57 meters. To determine the horizontal distance between the acorn and squirrel, subtract this distance from 5 meters.

$$d = 5 - 1.1 * \sqrt{10/4.9}$$

This is approximately 3.83 meters. To catch the acorn, the squirrel must move this distance in the same time as the acorn falls 10 meters.

$$\text{Average velocity} = (5 - 1.1 * \sqrt{10/4.9}) \div \sqrt{10/4.9} = 2.4 \text{ m/s}$$

I hope this helps you to understand how to solve this type of problem.

Hello!

For big answers like this I write it down on a piece of paper but I don't know how to put it into my answer :/

The average velocity of the squirrel is 2.4 m/s.

I hope it helps!

The elements carbon and sulfur are solids at room temperature. Can you reasonably predict that a compound of these two elements will also be a solid at room temperature?

Paraguay has developed more slowly than other south american countries

true or false

Someone please write me 3 body paragraphs that have a thing of the impacts on cell phones thank you i will mark brainliest

When dead plants decompose and nitrogen is returned to the soil, the interaction is between which two spheres? A. biosphere and atmosphere

B. geosphere and atmosphere

C. atmosphere and geosphere

D. biosphere and geosphere

How do nonmetals form bonds

Scholarly research has shown that \_\_\_\_\_ is important for recruitment to isis.?

How many integers between 1 and 40 are multiples of 3 or 7?

What is the distance from the crest to the equilibrium of a wave called? A. amplitude B. period C. frequency D. phase

Cette phrase est correcte: J'irais au musée si j'avais le temps. Select one:

True

False

Cette phrase est correcte: Nous allons au restaurant si nous serions riches.

Select one:

True

False

Cette phrase est correcte: Si mes parents m'achèteraient une voiture, je serais heureux.

Select one:

True  
False

Can you please explain why along with the correct answer? Please and thank you!

Which is true of the Federal Republic of Germany? A. It was Communist.

B. It was pro-American.

C. It was Socialist.

D. It joined together all of Germany.

Which substances will make a salt when combined? (2 points) Vinegar and antacids Soda and wine Soap and ammonia Fertilizer and detergent

How do scientists use the Doppler affect to understand the universe?

Which repeating decimal is equal in value to the fraction below?  $\frac{8}{9}$  a) 0.77777777

b) 0.88888888

c) 0.55555555

How did Japan bring the United States into world war 2

Donna manages the service desk and makes routine decisions related to customer refunds and merchandise returns. Donna also oversees the daily tasks of the cashiers and front desk employees. Donna is a(n) \_\_\_\_ manager. A. team leader B. first-line C. board D. middle E. upper

If \$5000 is invested at an interest rate of 4% each year, what is the value of the investment in 5 years? Write an exponential function and solve.

Photosynthesis and cellular respiration are often described in two ways: (1) they are chemically opposite;  
(2) they have a relationship to each other.

Explain what these two statements mean. Be sure to include the specific substances used and released by each process.

To what extent is capitalism a beneficial economic system?

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