

Structures and Forces Practice Quiz

Topic 3 - Mass and Force

1. The mass of an egg-sized lump of lead and the mass of an elephant ...

are very different

are about the same

are measured in Newtons

would change if they were measured in different places

2. Weight is a force that is measured by the gravitational pull on the object. It is usually measured in ...

Newtons

kilograms

grams

pounds

3. A student compared his mass and weight in two different places (Vancouver and Banff). Which statement is correct?

His mass and weight were unchanged.

His mass and weight were both the same.

His mass was the same, but his weight was different

His mass was different, but his weight was the same.

4. **'Crush It'** was an investigation activity that tested the strength of a shell structure. The responding variable in this activity was ...

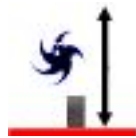
How much weight the shell could hold before it failed.

How much mass the shell could hold before it failed.

How long the shell performed its function.

How many different textbooks were used as weights.

5. Which force diagram shows what happens with very active Weepic, after it has cleared the wall?



Check your Answers

Structures and Forces Practice Quiz Answers

Topic 3 - Mass and Force

1. The mass of an egg-sized lump of lead and the mass of an elephant ...

are very different
(Text p. 298) The particles in an elephant are large, whereas there are fewer and much smaller particles in the lead, so it has less mass.

are about the same

are measured in Newtons

would change if they were measured in different places
2. Weight is a force that is measured by the gravitational pull on the object. It is usually measured in ...

Newtons (Text p. 299) Weight is measured by the force of gravity, which is measured in Newtons.

kilograms

grams

pounds
3. A student compared his mass and weight in two different places (Vancouver and Banff). Which statement is correct?

His mass and weight were unchanged.(Text p. 300) He has the same number and size of particles, and the force of gravity is constant, so his weight is the same as well.

His mass and weight were both the same.

His mass was the same, but his weight was different

His mass was different, but his weight was the same.

4. **'Crush It'** was an investigation activity that tested the strength of a shell structure. The responding variable in this activity was ...

How much weight the shell could hold before it failed.

(Text p. 302) The weight of the mass of books is what we were trying to find out

How much mass the shell could hold before it failed.

How long the shell performed its function.

How many different textbooks were used as weights.

5. Which force diagram shows what happens with this very active Weepic, after it has cleared the wall?



(After the Weepic has cleared the wall, the force of gravity is larger than the momentum force needed by the Weepic to clear the wall)