

Name _____

Date _____

WEIGHT AND MASS 2

If a stone has a mass of 89.91 kilograms and a weight of 198 pounds on Earth, what will its mass and weight be on another planet?



1. QUESTION

Mars has a gravity that is 0.38 of Earth's. What is the weight of the rock and its mass on Mars?



Planet Mars isolated in black

Answer:

Mass = kg

Weight = pounds

2. QUESTION

Venus has a gravity that is 0.88 of Earth's. What is its mass and weight?



Mass= _____kg

Weight = _____pounds

Name _____

Date _____

3. QUESTION

Jupiter has a gravity that is 2.4 times greater than Earth's.



Mass= _____kg

Weight = _____pounds

4. QUESTION

The Moon has a gravity that is 0.165 of Earth's.



Mass= _____kg

Weight = _____pounds

1. 5. QUESTION

Saturn has a gravity that is 1.07 of Earth's.



Mass= _____kg

Weight = _____pounds

6. QUESTION

What happens to the mass as you move from one planet to another?

- | | |
|--|---|
| ☐ The mass decreases. | ☐ The mass will vary depending on gravity. |
| ☐ The mass increases. | ☐ The mass stays the same. |

7. QUESTION

On which planet did the rock weigh the least?

- | | | |
|--------------------------------|----------------------------------|---------------------------------|
| ☐ Mars | ☐ Jupiter | ☐ Saturn |
| ☐ Venus | ☐ Moon | |

Name _____

Date _____

8. QUESTION

On which planet was the weight of the rock most similar on earth?

- | | | |
|--------------------------------|----------------------------------|---------------------------------|
| ☐ Mars | ☐ Jupiter | ☐ Saturn |
| ☐ Venus | ☐ Moon | |

9. QUESTION

Imagine you went to Saturn and spent a day there. How would your different weight affect you?

- ☐ I would find it easy to move around, but minor difficulty doing some manual tasks.
- ☐ I would find it difficult to move around and experience some difficulty doing some manual tasks.
- ☐ I would find it difficult to move around, but experience no difficulty doing manual tasks.