Welcome, Super Number Hero!

In this challenge, your goal is to master the skill of rounding numbers to 1 decimal place. Are you ready to take your brainpower to the next level?

Task 1: Quick Rounds!

Round each number to 1 decimal place.

1. 4.736 → __________
2. 8.349 → __________
3. 12.685 → __________
4. 0.923 → __________
5. 15.274 → __________

Super Tip! Look at the digit in the second decimal place. If it’s 5 or higher, round up. If it’s 4 or lower, round down.

Task 2: Match the Rounds!

Match each number with its rounded result.

Number	Rounded to 1 Decimal Place
23.947	a) 23.9
17.235	b) 12.7
11.578	c) 17.2
34.167	d) 34.2
11.839	e) 11.8

Task 3: True or False?

Decide if the following statements are true or false after rounding the numbers to 1 decimal place.

1. 3.456 rounds to 3.5 → _____
2. 7.321 rounds to 7.3 → _____
3. 0.689 rounds to 0.7 → _____
4. 19.444 rounds to 19.5 → _____
5. 2.149 rounds to 2.1 → _____

MEGA INQUIRY CHALENGE

The Space Mission Fuel Dilemma

Scenario:
You are part of a team preparing a rocket for a mission to Mars. To ensure a safe journey, the fuel calculations must be accurate to 1 decimal place. The mission depends on your ability to analyze and round the data effectively.

Here are the estimated fuel amounts needed for each stage of the journey:

- Launch Stage: 345.678 liters
- Orbit Insertion: 212.345 liters
- Mars Descent: 98.754 liters
- Return Launch: 189.456 liters
- Earth Re-entry: 123.987 liters

Your Task:

1. Round each fuel amount to 1 decimal place.
2. Predict how rounding up or down could impact the mission. For example, what would happen if you consistently rounded down?
3. The mission controller says the rocket can only carry 970.0 liters of fuel. After rounding, will the rocket be able to carry enough fuel? Justify your answer.
4. If you had to make a tough decision and remove fuel from one stage, which would you choose and why? Consider the importance of each stage in your answer.

Discussion Prompt:
What strategy would you use to
ensure the safest and most efficient fuel use?

Would rounding always be reliable in a real-life situation like this?

ANSWERS

Task 1: Quick Rounds!

1. **4.736 → 4.7**
2. **8.349 → 8.3**
3. **12.685 → 12.7**
4. **0.923 → 0.9**
5. **15.274 → 15.3**

Task 2: Match the Rounds!

Number	Rounded to 1 Decimal Place
23.947	23.9
17.235	17.2
11.578	11.6
34.167	34.2
11.839	11.8

Task 3: True or False?

1. 3.456 rounds to 3.5 → **True**
2. 7.321 rounds to 7.3 → **True**
3. 0.689 rounds to 0.7 → **False** (It rounds to 0.7)
4. 19.444 rounds to 19.5 → **False** (It rounds to 19.4)
5. 2.149 rounds to 2.1 → **True**

Problem-Solving Challenge: The Space Mission Fuel Dilemma
Rounded amounts:
Launch Stage: 345.7 liters
Orbit Insertion: 212.3 liters
Mars Descent: 98.8 liters
Return Launch: 189.5 liters
Earth Re-entry: 124.0 liters

If you consistently round down, the rocket might run out of fuel in later stages.
Total fuel after rounding: 345.7 + 212.3 + 98.8 + 189.5 + 124.0 = 970.3 liters.
The rocket would not be able to carry enough fuel if limited to 970.0 liters.
You might choose to remove fuel from Mars Descent or Orbit Insertion since the Earth Re-entry and Launch Stage are crucial for mission success.

Discussion Answer: Rounding must be used carefully—always rounding down could leave the rocket without enough fuel. A balanced strategy, considering which stages need more precision, would be safest.