CircuitMess **ANSWER KEY**

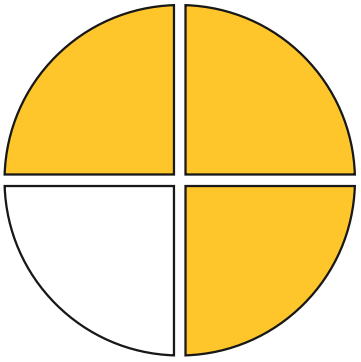
Module Review — Fractions, Decimals, Predictions, and Data

Mr. Bee Note:
Some answers may vary slightly depending on student explanations. Focus on **conceptual understanding**, not exact wording.

1 Fractions as Parts of a Whole

1 A circle is divided into **4 equal parts.**
3 parts are shaded.

Write the fraction: **3/4**



Explain what the fraction means in one sentence.

Acceptable explanations include:

- "Three out of four equal parts are shaded."
- "The whole is divided into four parts, and three are used."
- A correct drawing with explanation.

Mr. Bee Note: The fraction 3/4 means three of the four equal parts of the whole are shaded.

2 Fractions and Decimals

1 **Match each fraction to its decimal.**

1/2 **0.5**

1/4 **0.25**

3/4 **0.75**

Explanation: Fractions and decimals can represent the same amount of a whole using different number forms.

3 Making Predictions

1 Full power = **20 steps**
Predict how far the robot will go using:

1/2 power: **10** steps

1/4 power: **5** steps

1. Which prediction is larger? **1/2 power**

2. Why?

Acceptable explanations include:

- "One half is more than one quarter."
- "Using more power makes the robot go farther."
- "10 is greater than 5."

Mr. Bee Note: Half power is larger because it uses more of the total distance than one quarter power.

4 Testing Predictions

1 A robot was tested at **0.5 power.**

Prediction	Actual result
10 steps	10.2 steps

1. Are the prediction and result exactly the same? NO

2. Are they close? YES

Explanation: The result is very close to the prediction, even though it is not exact.

5 Understanding Variation

1 The same test was run three times:

A. 10.2 **B. 10.0** **C. 10.1**

1. Circle the **largest** result.
2. Underline the **smallest** result.

2 Finish the sentence:

Variation means that results are not exactly the same each time.

Acceptable alternatives:

- "results can change a little"
- "numbers can be slightly different"
- "results are close but not equal"

6 Comparing Numbers

1 Order from **smallest to largest:**

0.25 → 0.5 → 0.75

(Decimals: 0.75, 0.25, 0.5)

2 Order from **smallest to largest:**

1/4 → 1/2 → 3/4

(Fractions: 1/2, 1/4, 3/4)

Explanation: Fractions and decimals can be compared by thinking about how much of the whole they represent.

7 Explain Your Thinking

1 Why is 3/4 larger than 1/2?
Use words, pictures, or both.

Acceptable explanations include:

- "Three quarters is more than one half."
- "3/4 has more equal parts of the whole."
- "When you divide a whole into four parts, taking three is more than taking one out of two."

Correct drawings showing more area shaded for 3/4 than 1/2.

Mr. Bee: 3/4 is larger than 1/2 because it shows more equal parts of the same whole.