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Unit 1C
Significant Figures
Note-Taking Guide and Questions to Consider TEACHER

Main Ideas, Key Points, Questions:

After watching the video segment, write down key points, main ideas, and big questions.

Objective(s):

- *Understand significant figures and why they are used in measurements.*
- *Determine the number of significant figures in a measurement and in the final answer of a calculation.*

Notes:

During the video segment, use words, phrases, or drawings to take notes.

Summary:

After watching the video segment, write at least three sentences explaining what you learned.
You may ask yourself: "If I was going to explain this to someone else, what would I say?"

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Questions to consider:

1. **What does the number of significant figures in a measurement represent?**

The number of significant figures indicates a measurement's level of accuracy.

2. **When determining the number of significant figures in a measurement, are non-zero numbers significant? Explain.**

Yes, non-zero numbers are significant.

3. **When determining the number of significant figures in a measurement, are the zeros between non-zero numbers significant? Explain.**

Yes, the zeros between non-zero numbers are significant.

For example: 20,105 cm has five significant figures.

4. **When determining the number of significant figures in a measurement, are the zeros after a decimal and non-zero numbers significant? Explain.**

Yes, the zeros after a decimal and non-zero numbers are significant.

For example: 3.400 m has four significant figures.

5. **When determining the number of significant figures in a measurement, are the zeros between a decimal and non-zero numbers significant? Explain.**

No. These zeros are placeholders and are not a significant part of the measurement.

For example: 0.00035 L has only two significant figures.

6. **When determining the number of significant figures in a measurement, are the zeros after non-zero numbers but before a decimal significant? Explain.**

No. These zeros are placeholders and are not a significant part of the measurement.

For example: 29,400 kg has only three significant figures.

questions continued on next page

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Questions to consider:

7. **When adding or subtracting, how is the number of significant figures in the answer determined?**

The answer must have the same number of significant figures as the least exact measurement.

8. **When multiplying or dividing, how is the number of significant figures in the answer determined?**

The answer must have the same number of significant figures as the least exact measurement.