Name: ____

UW Math Circle Week 12 – Peanut Butter and Jelly Sandwiches

Version A

Today's circle is about writing clear instructions. It's an important topic in both mathematics and life in general! We'll practice using several real-world examples.

Problem 1. As a team, write **instructions for your instructor** to make a *jelly sandwich*. The following supplies will be available:

• Paper plate

• Jam in a small container

• Plastic utensils

• Two slices of bread

Note: Imagine that your instructor is a robot. They will do exactly what you say to do, and only what you say to do, and they only understand basic commands. (You can't just tell them to "make the jelly sandwich".) If you ask them to do something impossible, they will just stop and say they can't do it. And remember, pictures are not allowed.

When you're ready, let your instructor know so they can execute your instructions.

Problem 2. As a team, write **instructions for your instructor** to *tie their shoelaces* (in a standard single knot). The following supplies will be available:

• Instructor's shoe

When you're ready, let your instructor know so they can execute your instructions.



TOP Do not proceed to the next page until instructors say to do so.

Problem 3. As a team, write instructions for another team to recreate the picture.



The following supplies will be available:

- Paper plate
- Plastic utensils

- Jam in a small container
- One slice of bread

When you're ready, carefully tear the page along the dotted line and give it to an instructor.

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Team Name: _____

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Problem 4. As a team, write instructions for another team to recreate the picture.



The following supplies will be available:

- Paper plate
- \bullet Six cotton balls

- One pipe cleaner (color not important)
- One roll of Smarties (color important)

When you're ready, carefully tear the page along the dotted line and give it to an instructor.

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Team Name: _____

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Problem 5. As a team, write instructions for another team to recreate the picture.



The following supplies will be available:

• Two popsicle sticks

- One rubber band
- Two pipe cleaners (color not important)

When you're ready, carefully tear the page along the dotted line and give it to an instructor.

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Team Name: _____

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