

Sorting Problems for Understanding

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Sorting is a very strong skill for developing connections. Sorting allows students to interact with a larger number of problems and develop connections between problems. Because the students are not actually completing the problems, you can use “ugly numbers” (decimals, fractions) to emphasize that numbers are just numbers – using desensitization in our favor.

Successful Steps:

Plan: think about your audience

- How will they best interact with the activity?
- Is there anyone you are concerned about not working well with the activity? lost, overwhelmed, bossy...
- Will you do the activity full class or small group? Will you pick the groups or let them?
- How much or how little instruction will you give them?

Introduce: lay out the expectations

- What is the goal?
- You want to hear conversations in the groups. It is ok to politely disagree with each other.
- There may be many “right” ways to do the task
- Is the time frame task completion or limited time?
- What do they do when they are done?
- Remember you can individualize the rules.

Let Go: let the task happen

- It may not be pretty at first; it is ok to be stumped for a little bit.
- Walk around and ask questions of the different groups.
- DO NOT inject how you would do it on any group – if a group is stumped ask questions to get them to think about the task, visit another group and come back to make sure they are moving forward, if not, ask another question and repeat.
- Listen to the different conversations going on in each group, to have a sense of what will happen during the debrief.

Debrief: what did we conjecture, generalize or learn?

- Make sure to leave time for this!!
- Respond to what students are saying
- Encourage comments from each group

Copies of the activities used today (and more!) can be found at:

<http://sauriol sorts.blogspot.com/>