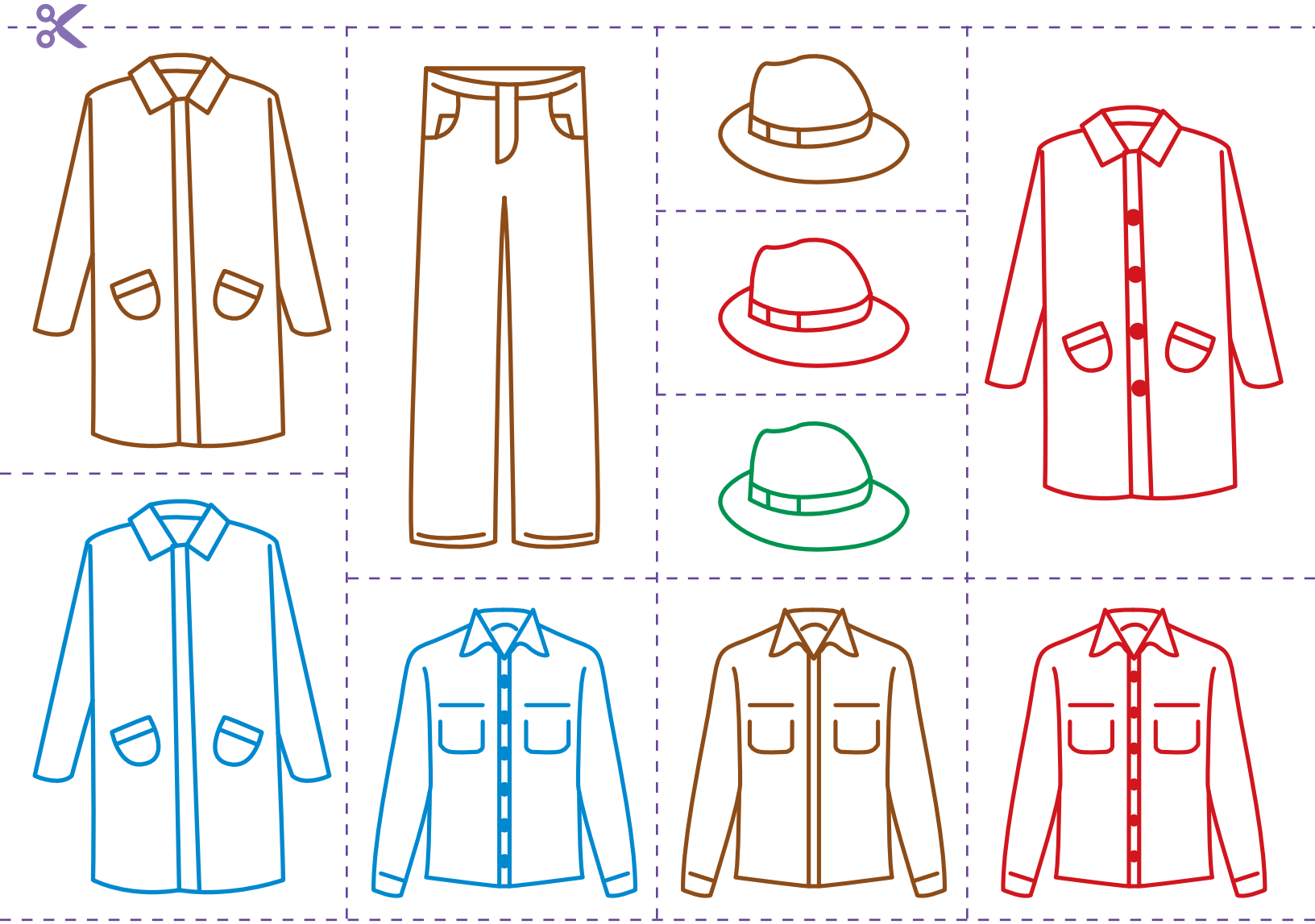
Name:

Split Them Up

Data

How can you sort the clothes into three groups that go together so that one group includes 4 things, one includes 3 things, and the last one includes 3 things?

Is there more than one way to do this?



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What's the point of this task?

This task has a problem-solving element in requiring students to create certain size groupings as a result of the sort. A student cannot just randomly create categories, but has to think more carefully about what the possibilities could be. He or she also has to think more broadly so that what might be perceived as separate categories (such as pants and hats or yellow things and green things) could go together.

Questions to facilitate the learning

- Were you able to make one group brown things? Were your other two groups based on color?
- Were you able to make one group pants? Why or why not?
- Could you or did you use a group that was not about color and not about whether it was a hat or shirt or pants or coat?
- Choose one of your sorts. What extra item might you include in each group that would not ruin the sorting rule?

Alignment to standards

This activity relates to sorting objects (CCSS K.MD.3). Processes involved include CCSS Standards for Mathematical Practice MP3: Construct viable arguments and critique the reasoning of others and MP6: Attend to precision.

Scaffolding the learning

- Could one of the groups be yellow things? Why or why not?
- What other things make the pictures different?
- What could the pants go with?

Extending the learning

Students might be asked to think about all the possible group sizes (besides 4-3-3) there could be.

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Rubric

Level 1	Level 2	Level 3	Level 4
The student is unable to sort the items to lead to the correct group sizes. The student has difficulty thinking of attributes he/she could use for sorting.	The student sorts the items creating the correct size groupings but has difficulty describing the categories of the sort. The student has difficulty explaining how to add items without ruining the sort.	The student sorts the items creating the correct size groupings and can describe each category without simply naming the items in it. The student shows an ability to combine what might be seen as disparate things in meaningful ways. The student has difficulty explaining how to add items without ruining the sort.	The student sorts the items creating the correct size groupings in at least two ways and can describe each category without simply naming the items in it. At least one sorting rule does not involve color. The student shows an ability to combine what might be seen as disparate things in meaningful ways. The student is able to explain how to add items without ruining the sort.