

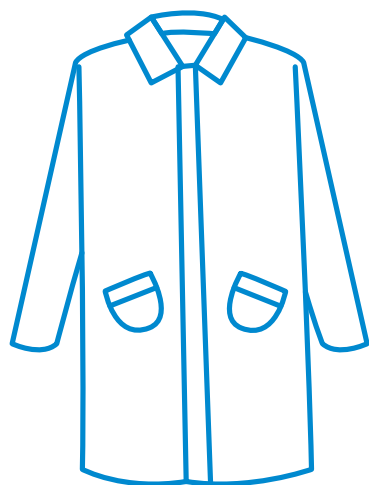
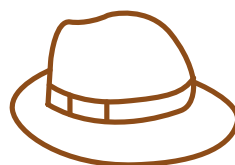
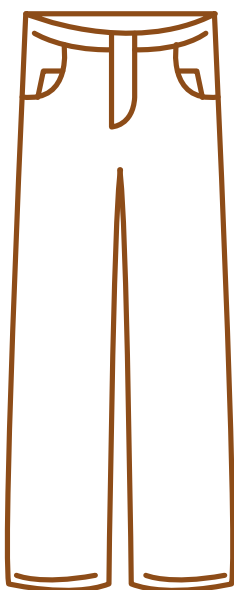
Name: _____

Data

Split Them Up

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

Is there more than one way to do this?



Reasoning behind the 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 trousers and hats or yellow things and green things) could go together.

Curriculum coverage

- Data
- Sorting objects by one or more criterion

Expectations

All	Most	Some
Sort items using the correct group sizes using simple categories.	- Sort the items creating the correct group size groupings, describing each category without simply naming the items in it. - Combine disparate items in meaningful ways.	- Sort the items creating the correct group size groupings in at least three different ways, describing each category without simply naming the items in it. At least one sorting rule does not involve colour. - Combine disparate items in meaningful ways, clearly defining why they could be grouped together. - Explain how to add items without ruining the sort.

Key questions

- Could one of the groups be yellow things? Why / why not?
- Were you able to make one group trousers? Why or why not?
- What could the trousers go with to make a group?
- Were you able to make one group brown things? Could your other two groups be based on colour? Why / why not?
- Could you make a group that was not about colour and not about whether it was clothes?

Scaffolding learning

- Cut out the objects and lay them out.
- Think of different ways you could sort them.
- Arrange them into three groups, one of 4 and two groups of 3.
- Think about what category you are using to sort the items.
- Can you arrange them in different ways that match the criteria?

Challenge

Remove the group size rule. How could the items now be grouped? What categories have you chosen? Create your own group size rules and items. Challenge a partner to sort them according to your criteria.