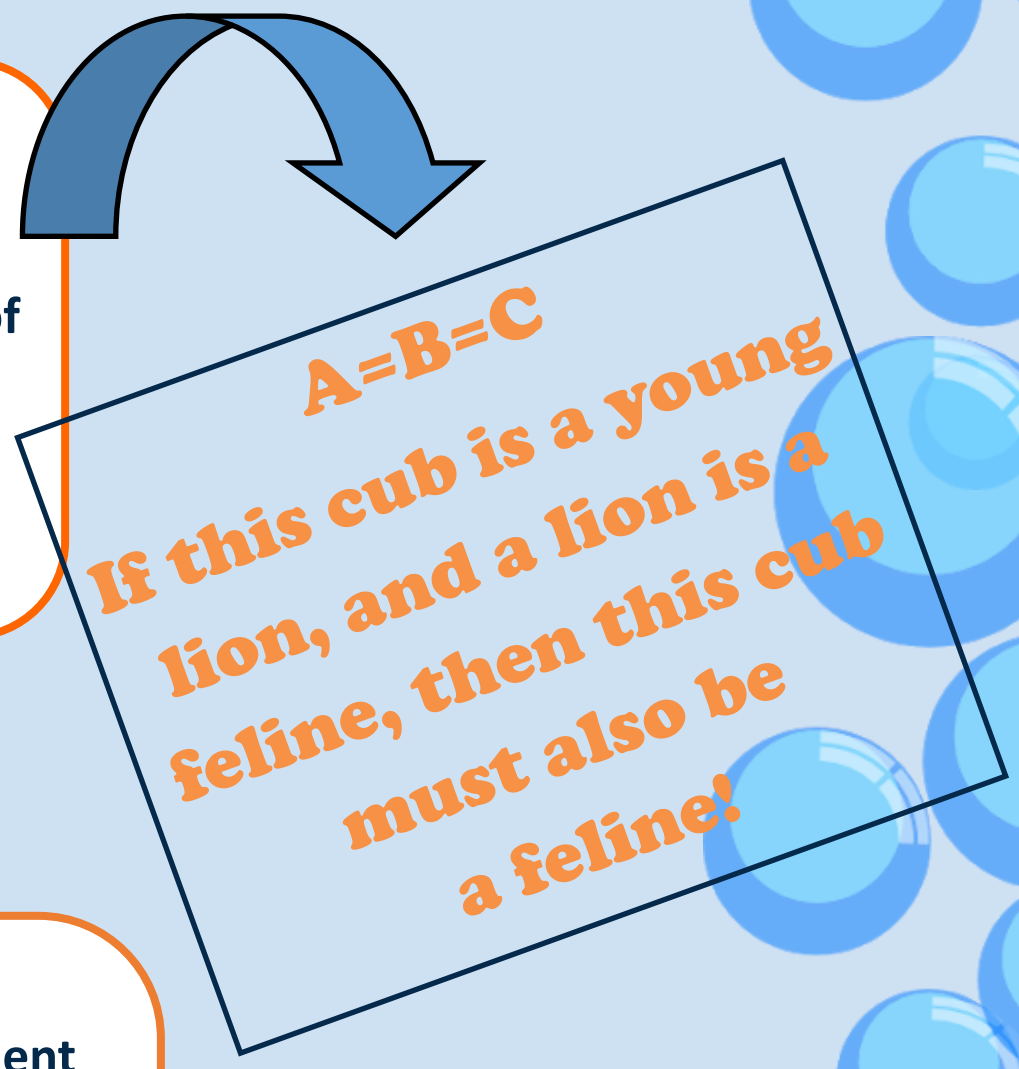
Logic and Sequencing: A Game

Critical thinking skills are important to use in our everyday lives. Whether it's tracing our steps to figure out where we left our keys, or writing an outline to determine the order and content of a story or research paper. Pieces of critical thinking, including logic and sequencing, are an especially important skill to practice for math and computer programming. But what does that even mean?

Logic:

This is basically an argument with a provable conclusion. It contains set of true statements, the last being the conclusion. The argument is logical when the conclusion must be true if the statements are true too.

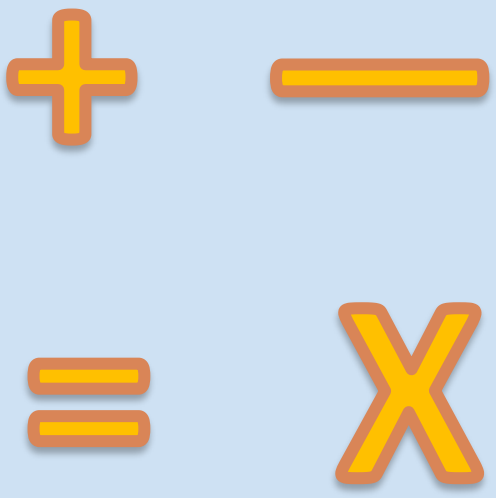


Sequencing:

Computer programming is dependent on logic! One of the three basic logic structures in computer programming is a *sequence structure*. This is an action, or event, that leads to the next action in a predetermined order. The sequence can contain any number of actions, but no actions can be skipped, or performed out of order.

Challenge!

Logic and Sequencing can be applied just about anywhere! Challenge a friend to build a peanut butter and jelly sandwich using only the exact instructions you provide, in the order you provide them. If your partner is REALLY good at only performing the exact instruction and no more (like a computer) making a sandwich will need lots of logic and a very long and specific sequence of instructions!



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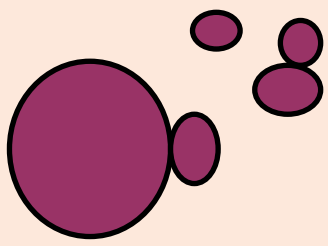
Can You Make a Sandwich?

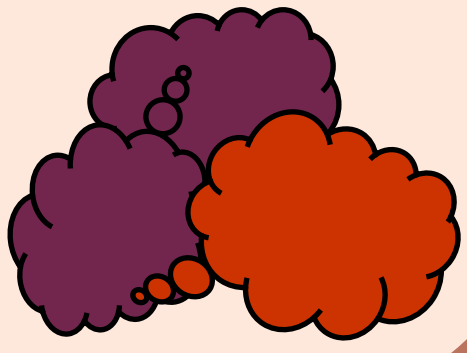
Choose one person to be “Chef-Bot” The rest of you are Programmers!

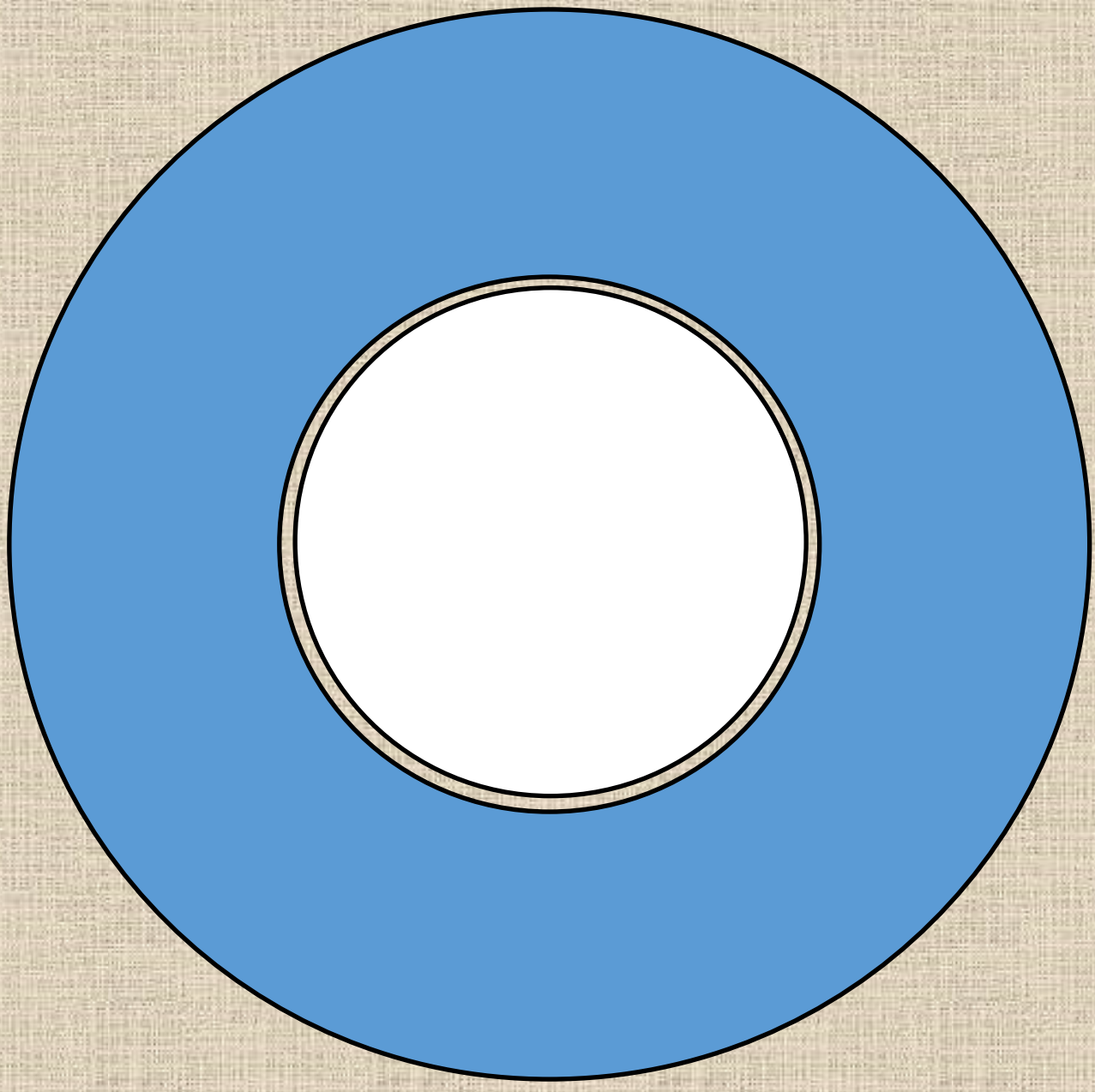
Programmers! It is your job to figure out and give clear directions, so that your teammate, Chef-Bot, can construct a Peanut Butter and Jelly Sandwich.

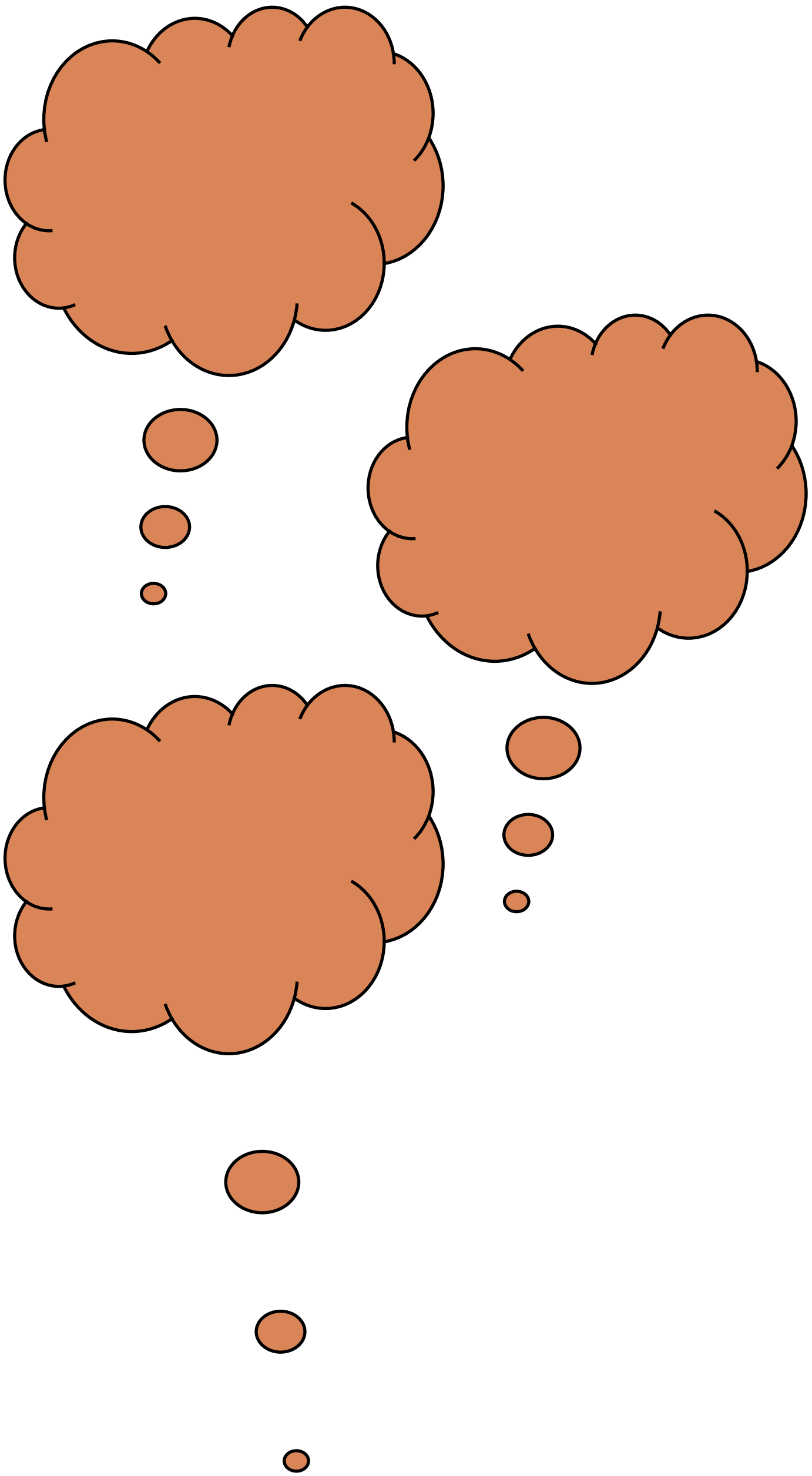


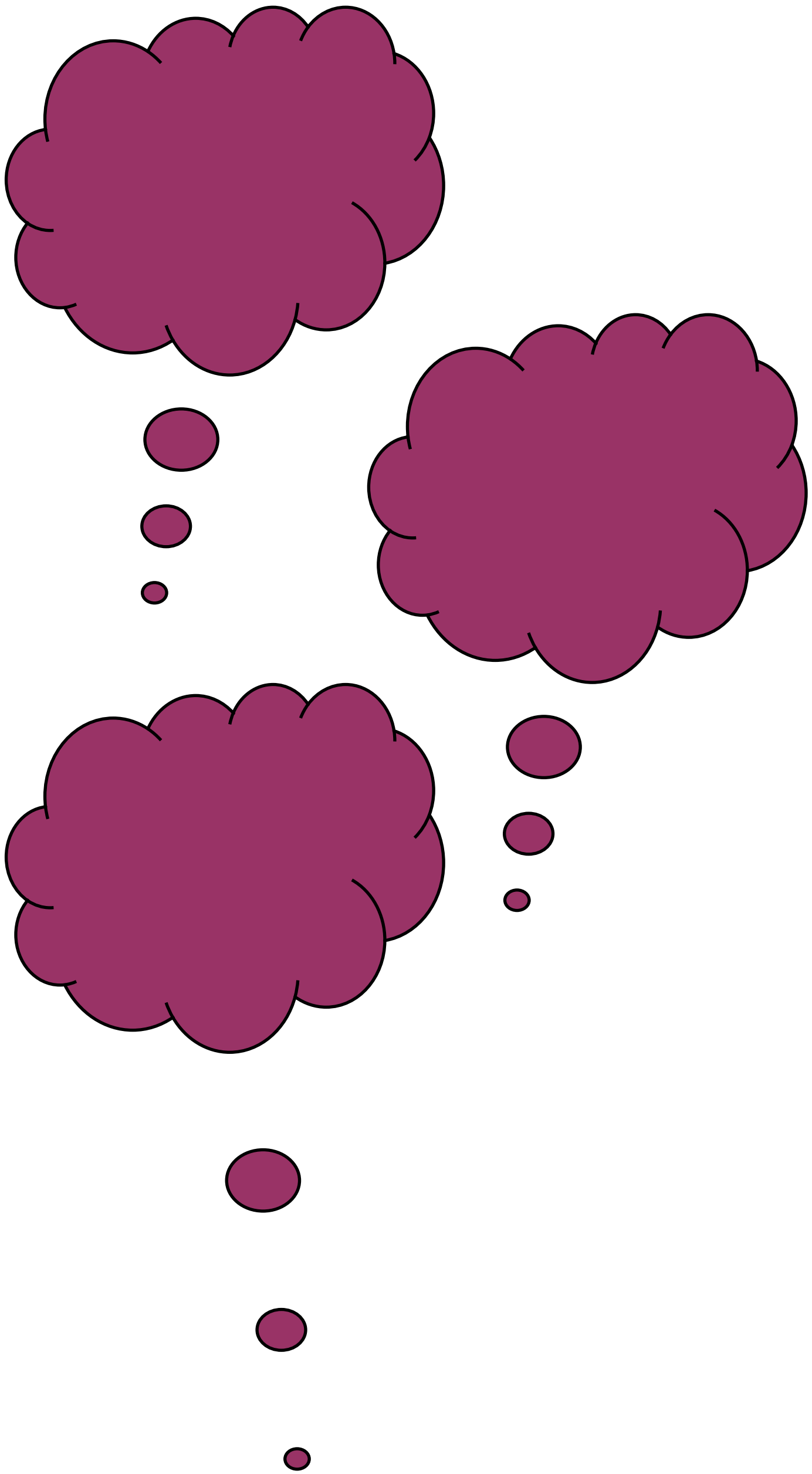
Rules!

- **Programmers don’t get to touch anything! Imagine yourselves as floating heads….**
- **Chef-Bot! You can touch anything, but you are only able to follow ONE direction at a time. For example “get the jam and put it on the bread” won’t work, but “pick up the jam-jar with your right hand” does. (Also only follow directions for making a sandwich, so if a programmer tells you to stick a finger in your ear, don’t do it!)**

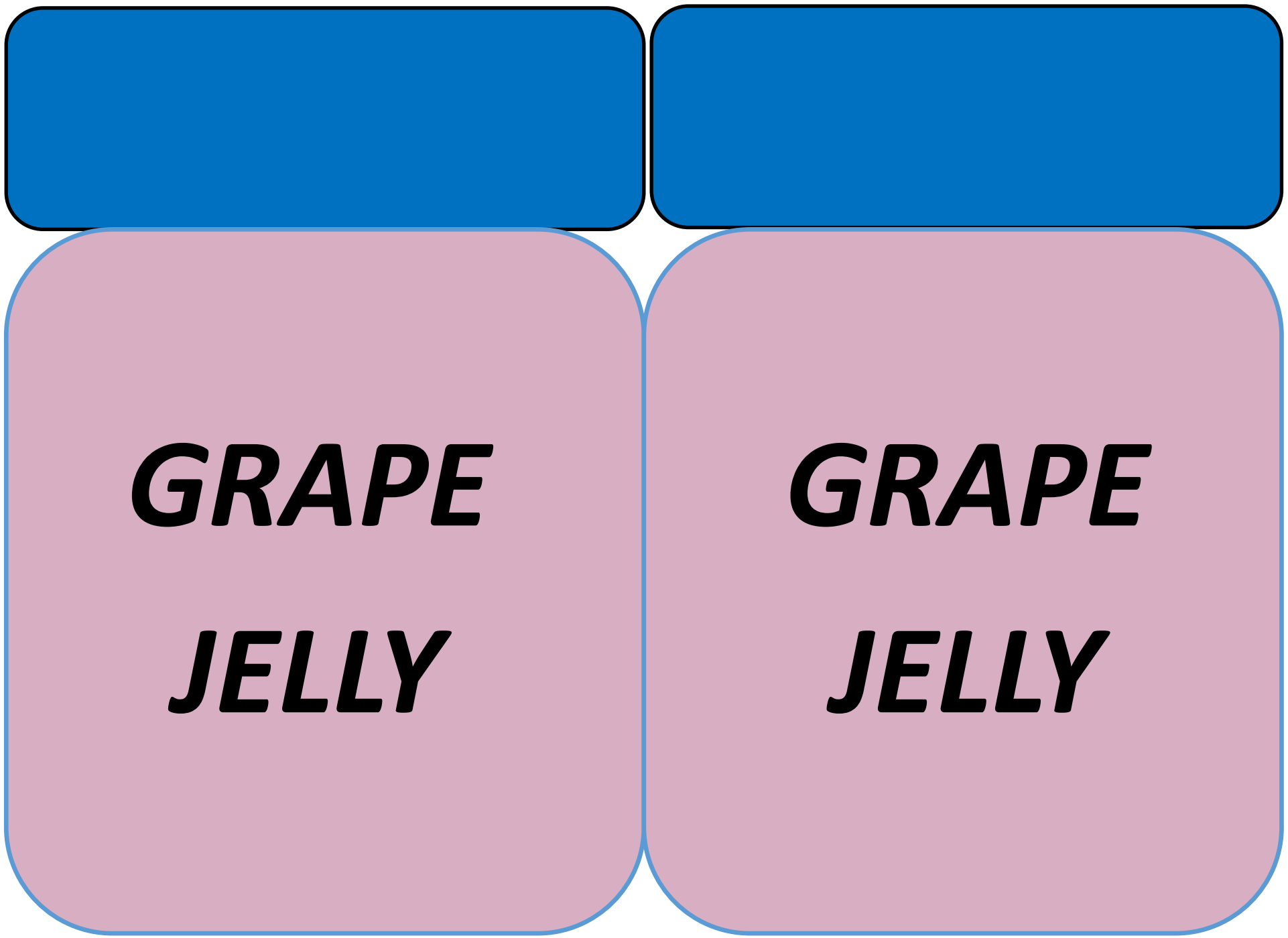








PEANUT BUTTER	***PEANUT BUTTER***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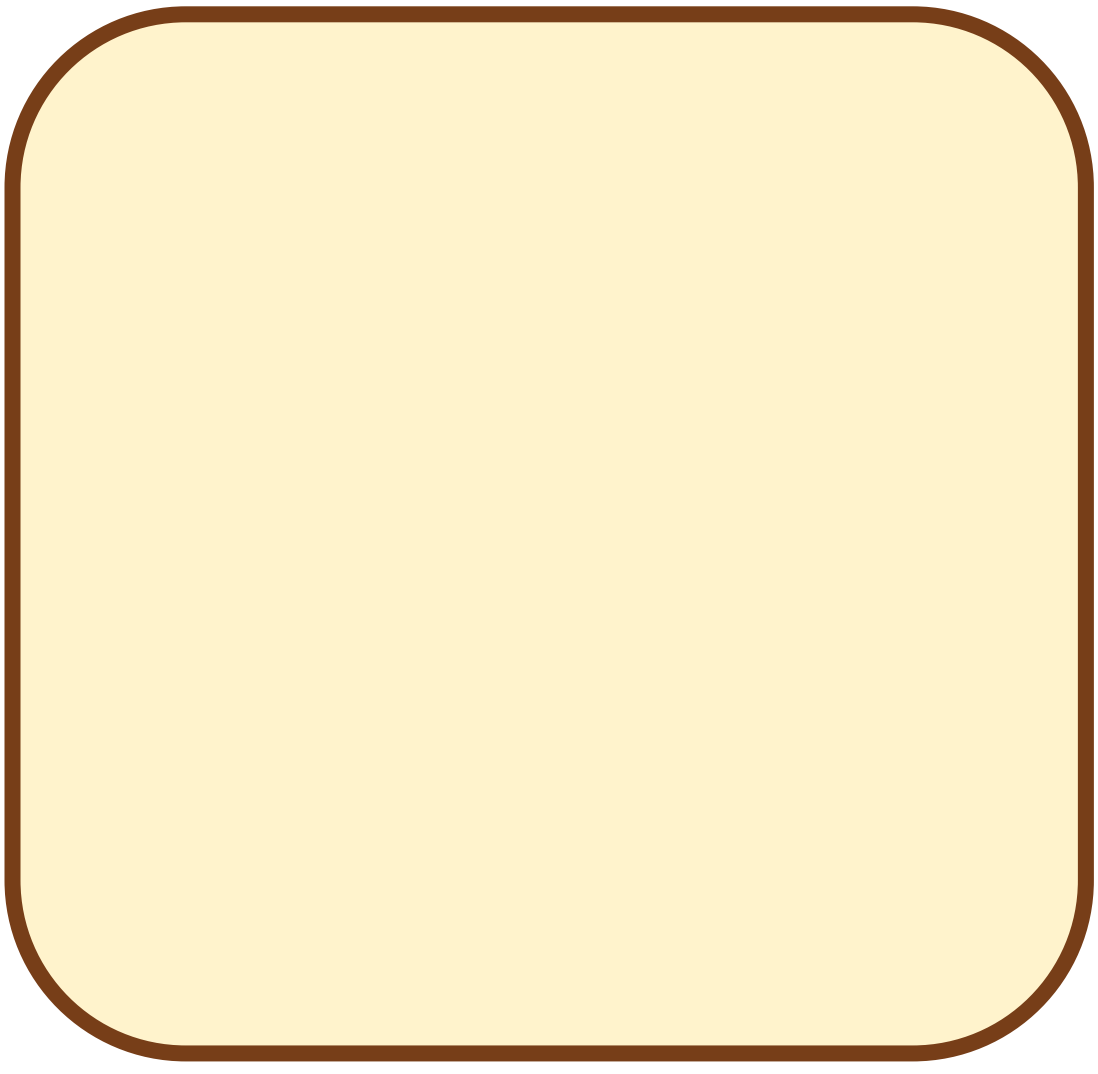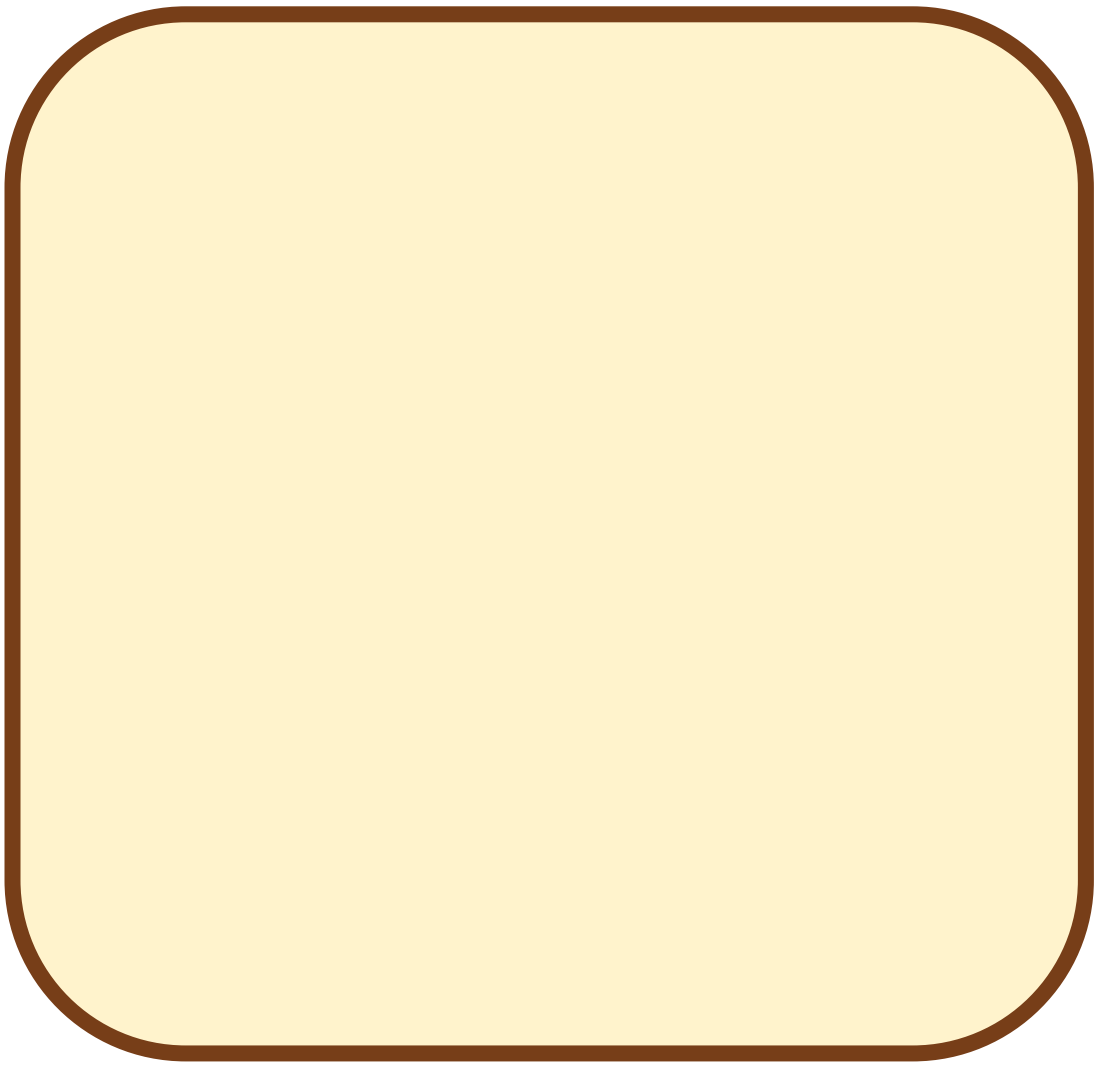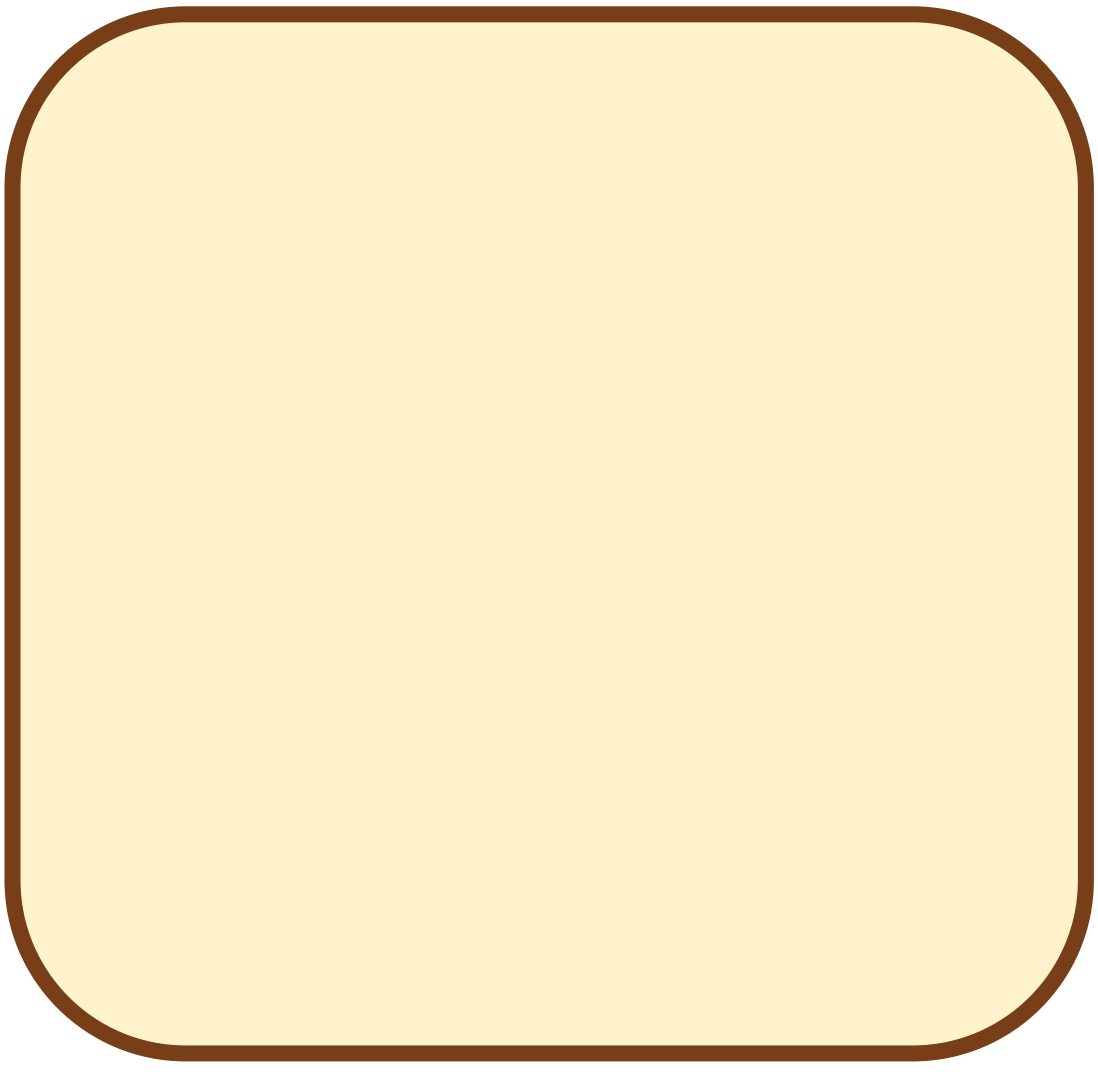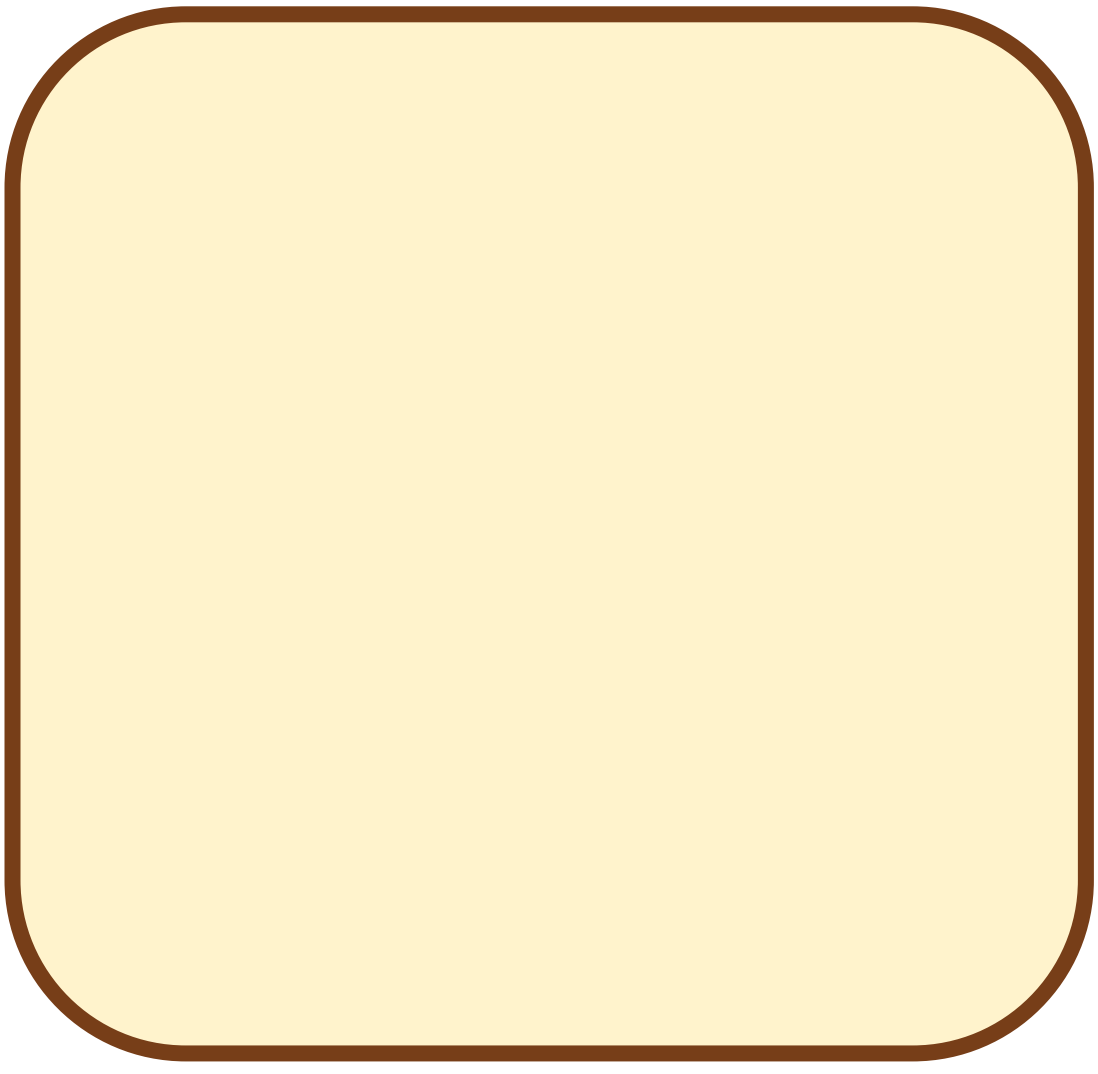
BREAD BAG