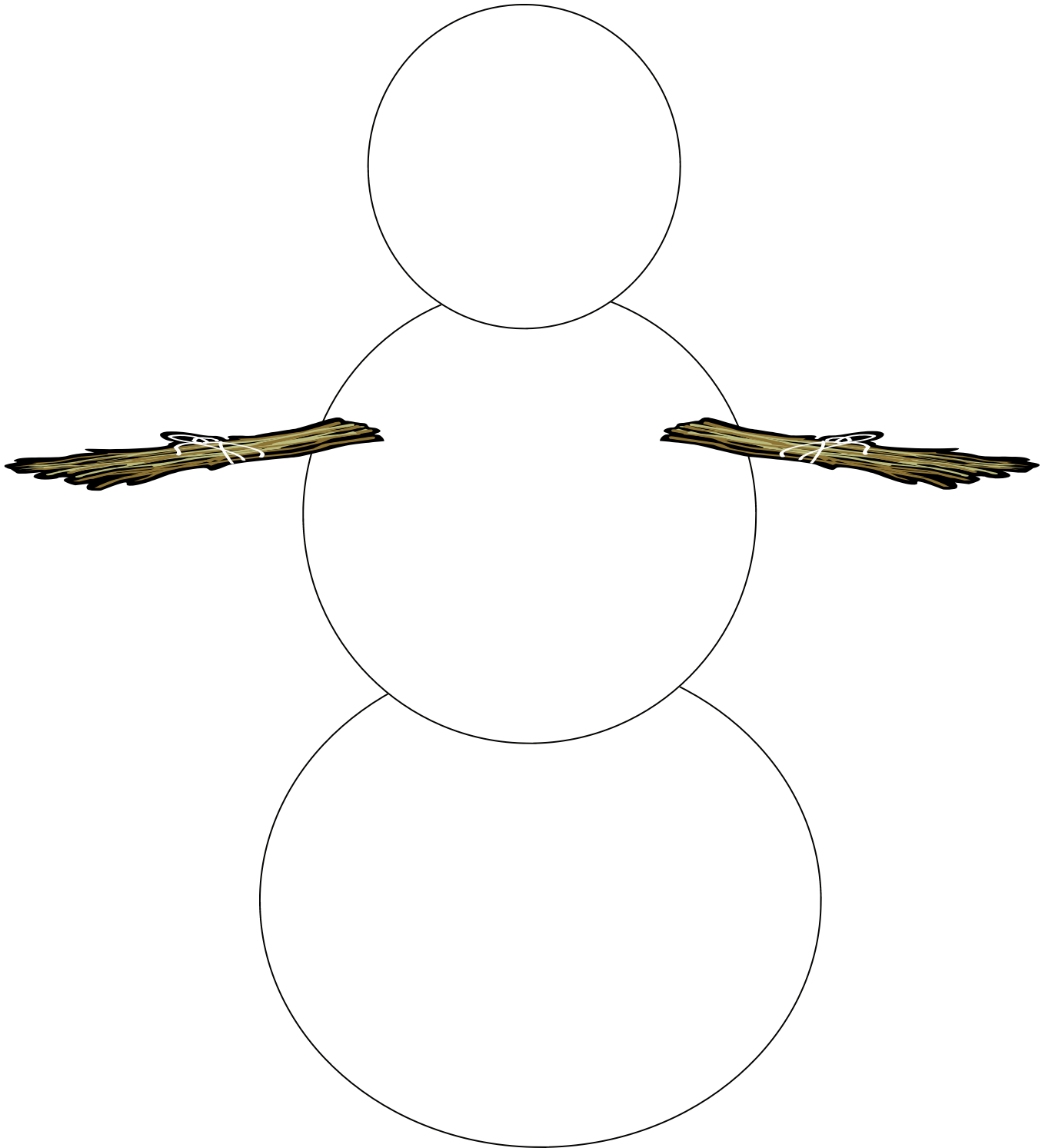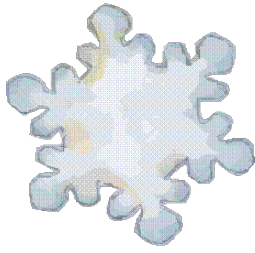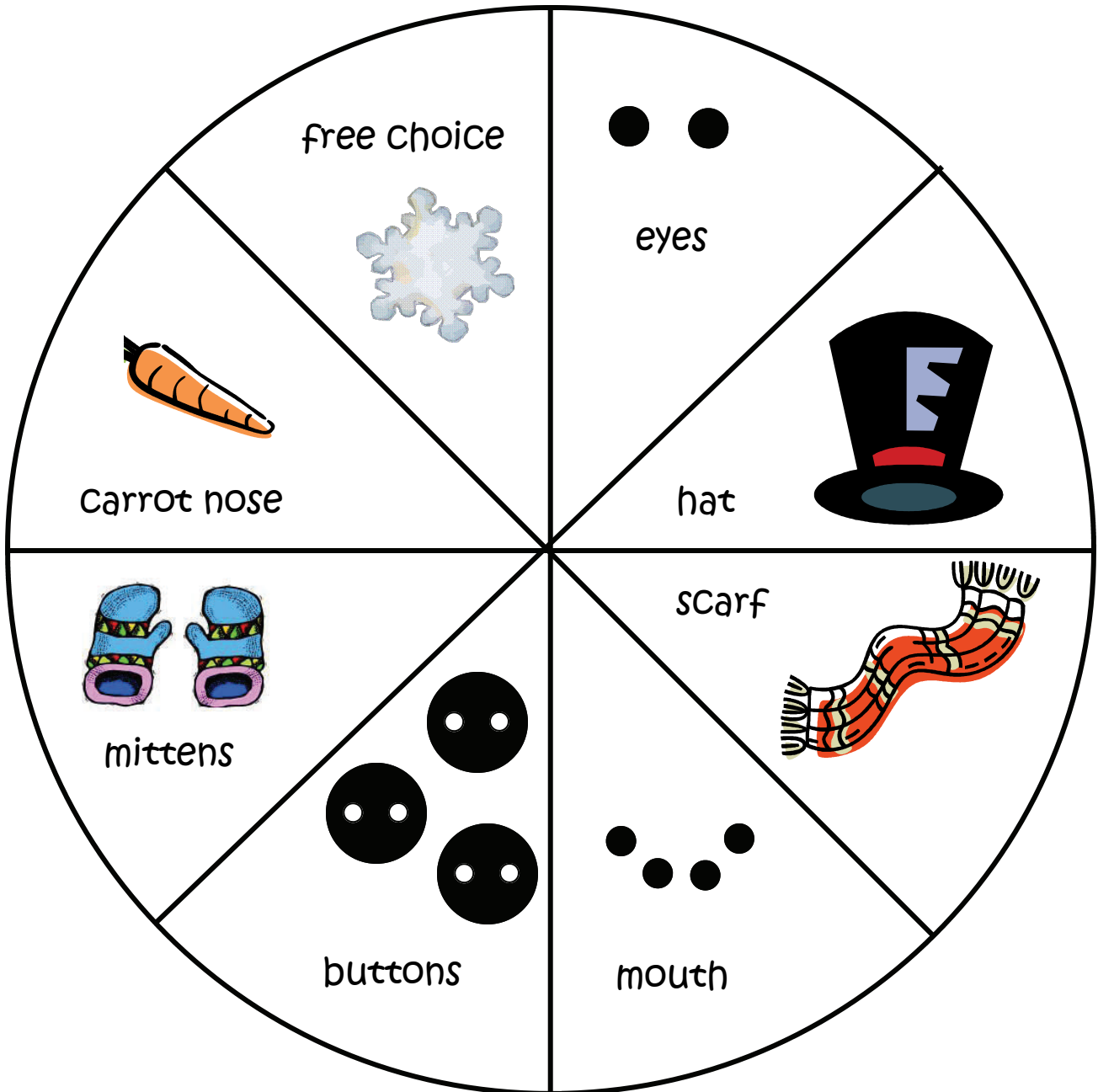# Snowman Probability Game

Snowman Game Mat
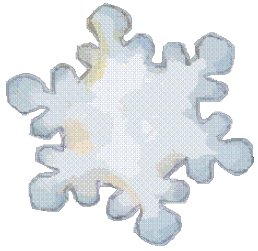
Snowman Probability Game
Snowman Spinner

Snowman Probability Game
## Game Directions

Materials:
- snowman game mat
- snowman dress-up items: eyes, mouth, nose, scarf, mittens, buttons, hat
    - NOTE: these may be cut from craft foam for game longevity
- snowman spinner (cover with transparent spinner, or affix spinner)

Directions:
- Each player places the snowman game mat in front of them.
- First player spins the spinner , takes that item to dress his/her snowman, and makes a tally mark next to that item on the Recording Sheet.
- Second player does the same.
- Play proceeds around the table with each player spinning the spinner, then placing that item on his/her snowman.
- If a player spins eyes, he/she places both eyes on the snowman.
- If a player spins mouth, he/she places 4 dots for the mouth.
- If a player spins mittens, he/she places both mittens on the snowman.
- If a player spins buttons, he/she places 3 buttons on the snowman.
- If a player spins an item that he/she already has, then he/she does not get to place anything on the snowman, but he/she makes another tally next to that item on the Recording Sheet.
- If a player spins the snowflake "Free Choice" section, then he/she may add any item that is missing on his/her snowflake.
- The first player to get all snowman items and completely dress his/her snowman wins the game.
- If students are using the Recording Sheet for the data collection activity, student s should continue spinning until they have completed their snowmen.

Data Collection:
- Before playing the game, ask students to estimate how many times they think they will have to spin to get all of the snowman pieces. Ask students to explain their predictions and record these on the board or chart paper for future reference.
- Each student uses a Snowman Probability Recording Sheet and makes a tally for each spin next to the object.
- When the student has all of the objects, he/she counts the tallies to find the total number of spins it took to completely dress the snowman.
- The student records this number on the class line plot.
- When all students have completed their snowmen and added their totals to the line plot, gather students for a data analysis. Ask students to look at the results and look at the predictions. How do they compare?
- Use statistical measures of median, mode, range or mean, as appropriate for students' mathematical abilities.
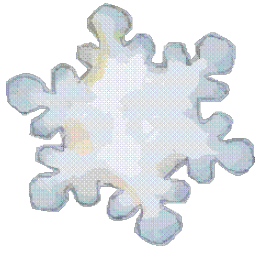
Snowman Probability Game
Recording Sheet

Snowman piece	Tally	Total spins
eyes		
nose		
mouth		
buttons		
scarf		
mittens		
hat		
snowflake		