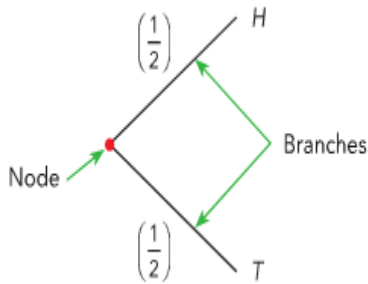


## 11.1 Compound Events Day 2

TSW

- Understand Compound events
- Represent Compound events

### Vocabulary- Tree Diagram

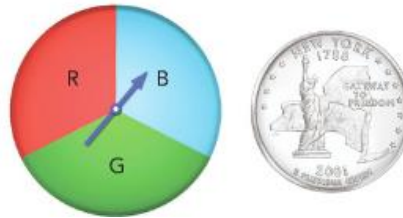


For drawing any tree diagram, you should take note of the following:

- Each branch starts from the same node.
- The number of branches indicates the number of outcomes the event has.
- The outcome for the event is written at the end of a branch.
- The probability of the outcome of an event is written in parentheses along the branch.
- The probabilities of the branches from each node must add up to 1.

### Example 3 Represent a compound event using a tree diagram.

- a) Robyn has a fair spinner and a coin as shown. She first spins the spinner once and then tosses the coin. Draw a tree diagram to represent all possible outcomes. Then tell the number of possible outcomes.



- b) Eric has a yellow, a pink, and a green highlighter in his pencil case. He also has 1 red pen and 2 black pens. Eric randomly selects a highlighter and a pen. Draw a tree diagram to represent all possible outcomes. Then tell the number of

### Guided Practice

**For each compound event, draw a tree diagram to represent the possible outcomes. Then tell the number of possible outcomes.**

- 8 Joshua has two bags. The first bag contains 2 blue beads and 1 green bead. The second bag contains 3 lettered cards with the letters P, Q, and R. Joshua randomly takes an item from the first bag, and then from the second bag.
- 9 A fair coin is tossed, and then a fair four-sided color die with faces painted yellow, green, blue, and black is rolled. The color facing down is the result recorded.

