



Basic Probability Lesson Plan: Grade 7

Grade Level: **Seventh Grade** | Duration: **Two days, 30 minutes per lesson**

Objective:

In this lesson plan, seventh graders use BrainPOP resources to learn how to calculate and express basic probability, and how we can apply it in real life situations.

Students will:

- 1. Build Background Knowledge:**
 - Watch the BrainPOP Basic Probability movie.
- 2. Think and Do:**
 - Vocabulary: Define vocabulary and use in a sentence.
 - Worksheet: Determine the probability of different events.
- 3. Assess**
 - Take the Basic Probability quiz.

Preparation

- Preview the BrainPOP movie [Basic Probability](#) to plan for any adaptations.
- Read [Basic Probability Background Information](#)
- Create and schedule Day 1 assignment: [Basic Probability](#) and [Vocabulary](#)
- Create and schedule Day 2 assignment: [Basic Probability](#), [Worksheet](#), and [Quiz](#)

Before the Lesson

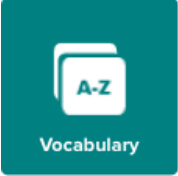


Background knowledge helps students make sense of new ideas and experiences. To activate prior knowledge, ask these questions:

- *What's the probability of a quarter landing on heads when you flip it?*
- *What's the probability of rolling a die and having it land on 6?*

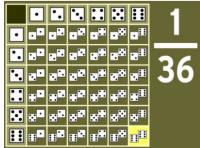
DAY 1: Build Background (10 minutes)

Lesson Steps	Offline Modifications	Personalization	ELL/Language Development
<div data-bbox="405 407 607 553" data-label="Image"> </div> <p>1. Watch Basic Probability.</p> <p>Click pause at noted time codes to discuss key ideas:</p> <p>Time code 0:23 What is probability?</p> <p>Timecode 1:02: When a probability is expressed as a fraction, what does the bottom number represent?</p> <p>Timecode 1:35: How can you find the probability of an outcome when rolling two dice?</p>	<ul style="list-style-type: none"> Print the movie transcript and highlight evidence that answers each of the discussion questions. Two students act out the transcript, one as Tim and the other as Moby. 	<ul style="list-style-type: none"> Set a specific viewing purpose for individual students or small groups based on lesson objectives and student readiness. For example, have students focus on expressing probability as a fraction. Pause at two key points and prompt students to summarize. Support recall by having students draw one or two key ideas from the movie. 	<ul style="list-style-type: none"> Pause for new vocabulary. Use the word in a sentence. Prompt students to say the word and repeat the sentence. Invite them to draw a picture of the word. Create a word wall with vocabulary and the drawing. Pause at key points and ask the discussion questions in home language or English. Watch the BrainPOP ELL movie about Probability if your school has access. <div data-bbox="2107 976 2368 1187" data-label="Image"> </div>



DAY 1: Think & Do (20 minutes)

Lesson Steps	Offline Modifications	Personalization	ELL/Language Development
<div style="text-align: center;">  </div> <p>2. Students open their Vocabulary assignment. Or, if not using Assignment Builder, model how to open Vocabulary.</p> <p>Students click Flip All or each term individually.</p> <p>To hear a term read aloud, click the speaker icon.</p> <div style="text-align: center;">  </div> <p>Students type a definition and sentence for each term.</p> <p>When they finish, students click Submit To Teacher and/or print out.</p>	<ul style="list-style-type: none"> Print Vocabulary. <div style="text-align: center;">  </div> <ul style="list-style-type: none"> Students write a definition and sentence for each term. 	<ul style="list-style-type: none"> Assign appropriately challenging words to individual students. Assign a few of the six terms to individual students to define and use in a sentence. As a challenge, students can add two additional terms, writing a definition and sentence for each. 	<ul style="list-style-type: none"> Say the term(s) in students' home language. Then say the words in English. Have the student repeat in English. Use the term in a sentence. Prompt students to say the word and repeat the sentence. Click the speaker icon to hear the term read aloud.

DAY 2: Build Background (5 minutes)

Lesson Steps	Offline Modifications	Personalization	ELL/Language Development
<div style="text-align: center;">  </div> <p>3. Watch Basic Probability again.</p> <p>Prompt students to find a fact or something new that they didn't notice the first time.</p>		<ul style="list-style-type: none"> Students return to their drawings of key concepts from the first viewing and add new details. 	

DAY 2: Think & Do (20 minutes)

Lesson Steps	Offline Modifications	Personalization	ELL/Language Development
<div style="text-align: center;">  </div> <p>4. Students open their Worksheet assignment. Or, if not using Assignment Builder, model how to open the Worksheet.</p> <p>Students determine the probability of an event.</p>	<ul style="list-style-type: none"> Print the Worksheet.  Students determine the probability of an event. 	<ul style="list-style-type: none"> Provide an example of finding the probability of an event in the Worksheet. Demonstrate how to return to the movie to find evidence. Assign two or three probability events to individual students. Support recall by prompting students to revisit the drawings they made after watching the movie. 	<ul style="list-style-type: none"> Provide an image or have students draw the event description. Before students write, have them use their home language or English to discuss what they plan to write.

When they finish, students click the **Submit To Teacher** button and/or print out.

DAY 2: Assess (5 minutes)

Lesson Steps



Students open their Quiz assignment. Or, if not using the Assignment Builder, model how to open the [quiz](#).

If you assigned the quiz, you will see students' results in your Dashboard. If not assigned, students click the **Submit to Teacher** button.

Offline Modifications

- Print the [quiz](#) for students to complete.

Personalization

- **Read aloud** the questions and answers.
- **Reduce the number** of questions and/or possible answers (using the Quiz Mixer).
- **Support recall** by having students review drawings they made during the movie..

ELL/Language Development

- **Read aloud the quiz** in students' home language.
- **Highlight the key vocabulary** in a printable version of the quiz.