

# Sounds

## Textbook

## Sounds



### Adding Sound to Programs

Students in Mr. Thompson's computer lab were testing their quiz games. "How do users know if they got the answer right?" asked Nina.

"You can add sound blocks," Mr. Thompson explained. "Different sounds tell users different things."

Nina added the tadah sound after correct answers and the error sound after wrong ones. "Now players hear if they're right or wrong," she said.

James was coding a timer program. "I'll use the click sound for each second and the pop sound when time's up." His program now gave audio feedback.

Sarah discovered she could record her own voice. "I recorded 'Game Over' for when the player loses," she said.

"Sound blocks make programs communicate better," Mr. Thompson noted. "Users know what's happening even without looking at the screen."



### What Are Sound Blocks?

Sound blocks add audio to your programs:

- **Pop:** Quick popping noise

- **Click:** Soft clicking sound
- **Tadah:** Celebration sound
- **Woosh:** Fast whooshing sound
- **Error:** Alert sound for mistakes
- **Record Sound:** Create your own audio

## Sound as Program Feedback

Sounds tell users important information:

- **Success:** Tadah sound when completing a task
- **Error:** Error sound when something goes wrong
- **Progress:** Click sound while loading or waiting
- **Movement:** Woosh sound when sprites move fast
- **Alerts:** Pop sound to get attention

## When to Use Sounds

Add sounds for:

- Starting or ending programs
- Correct or incorrect actions
- Sprite collisions or interactions
- Completing levels or tasks
- Timer warnings

## Creating Sound Patterns

Combine sounds with loops:

- Repeat 3 → Click sound (makes 3 clicks)
- Different sounds in sequence create patterns
- Use wait blocks between sounds for rhythm

## Recording Your Own Sounds

The Record Sound block lets you:

- Record short voice messages
- Create custom sound effects

- Add instructions or feedback
- Make unique program sounds

Keep recordings short and clear.

## Sound Block Placement

Where to add sound blocks:

1. After event blocks to start programs
2. Inside loops for repeating sounds
3. After sprite actions for feedback
4. With conditional events (On Touch, On Tap)

## Appropriate Sound Use

Good practices:

- Use sounds that match the action
- Don't overuse sounds (too many = confusing)
- Test volume levels
- Consider when silence is better

## Multimedia Reference

In advanced computer science, sound combines with other media:

- **Images + Sound** = Slideshows with narration
- **Video + Sound** = Movies or animations
- **Text + Images + Sound** = Interactive presentations

This multimedia approach enhances communication in programs.

## Critical Thinking Questions

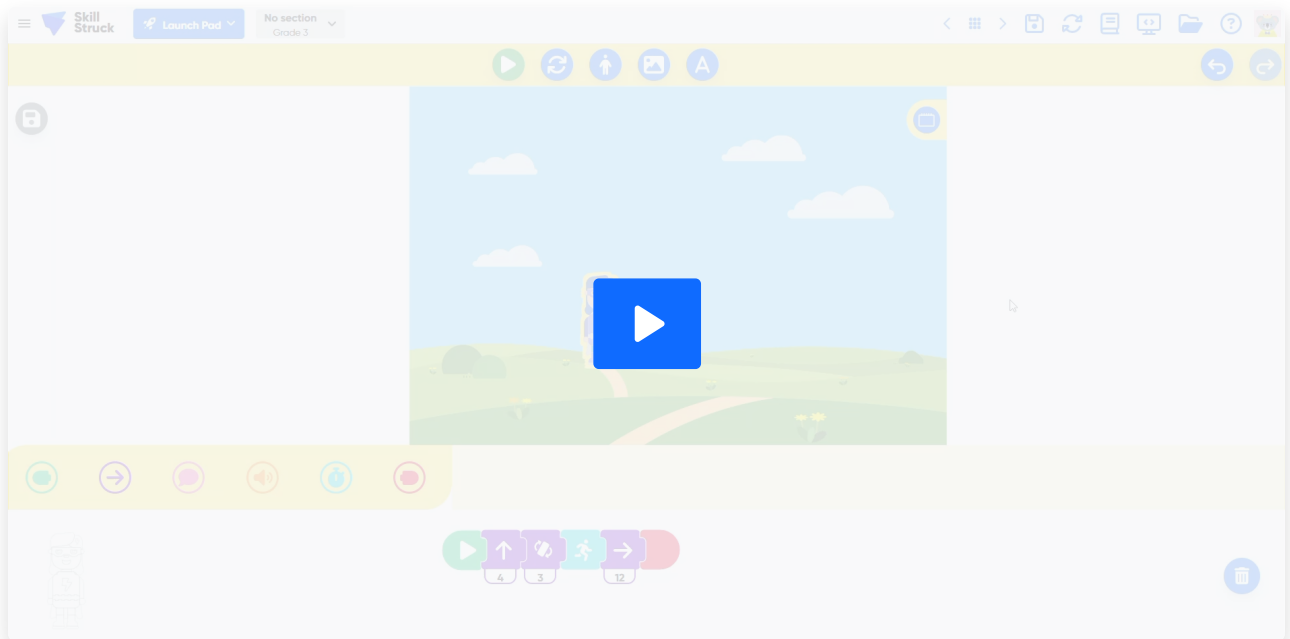
1. How do sound blocks help users understand what's happening in a program?
2. When would you use the error sound instead of the tadah sound?
3. Why might too many sounds make a program confusing?

## Sentence Stems

- "Sound blocks help programs (blank space) by (blank space)."
- "I add sounds when (blank space)."
- "The (blank space) sound tells users (blank space)."

# Sound Blocks

Watch the video to learn how to code the different sound blocks.



## Questions (5)

1. What can you do with the sound blocks in your program?

MULTIPLE CHOICE

Choose the correct answer:

- A. Change the size of a sprite
- B. Make your sprite move
- C. Add sounds to your program
- D. Hide your sprite

2. If you want to make your sprite say something, which block should you use?

MULTIPLE CHOICE

Choose the correct answer:

- A. Pop
- B. Click
- C. Tadah
- D. Record sound

MULTIPLE CHOICE

**3. Which block lets you make your sprite jump with a cool flying sound?**

**Choose the correct answer:**

- A. Tadah
- B. Woosh
- C. Click
- D. Pop

MULTIPLE CHOICE

**4. What could you use the tadah sound for in your program?**

**Choose the correct answer:**

- A. To make the sprite move
- B. To play a sound when something goes wrong
- C. To celebrate when something good happens
- D. To make the sprite disappear

MULTIPLE CHOICE

**5. True or False sound block make the sprite change what it looks like?**

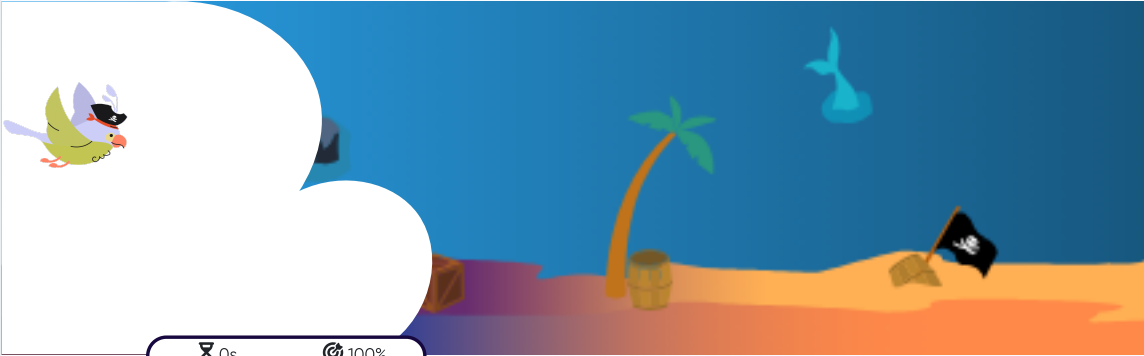
**Choose the correct answer:**

- A. True
- B. False

Games (2)

1. Sounds Typing Race

Full ScreenAudioInstructionsRestartPause



0s100%

a

udio effects add sound

## 2. Sounds Categories

Sort the action into "Use sound block" or "Use a different block"

Full Screen

Audio

Instructions

Answer Key

Pause




Clear All

Check Order

Attempts: 0

You want your sprite to make a "click" sound every time it collects a coin.

The sprite waits for 2 seconds before moving to the next location.



You want your sprite to make a "woosh" sound when it flies through the air.

The sprite repeats an action 10 times.

Use a Different Block

Use Sound Block

## Blocks Challenges (5)

### 1. Underwater Chat



#### Underwater Chat

Did you know some species of fish can “talk” to each other. Some fish like catfish make clicking or popping sounds to communicate with each other and warn each other of danger.

Program at least 2 sprite fish “talking” to each other as they swim around the scene. Practice using the control loop block to have the fish continue to swim around and at least 2 sound blocks for each fish.

2 8 4 2 2

Submit ↑



### 2. Night Flight



#### Night Flight

Owls are nocturnal meaning they wake up and take flight at night! Using the campsite background, program the owl sprite to fly around the scene. Use sounds and control blocks to speed up and slow down the flight.

1 8 1 2 1

Submit ↑





### 3. Popping bubbles

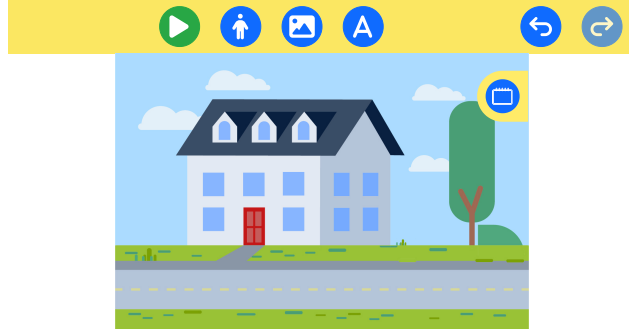


#### Popping bubbles

Did you know that when you pop a bubble, it often pops faster than the blink of an eye! Using the ball sprite as your bubble, make the bubble grow then disappear and pop.

1 2 1 1

Submit ↑



### 4. Racecar

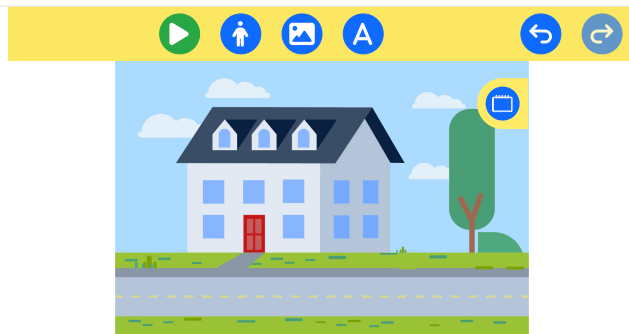


#### Racecar

Using the car sprite, have it race across the scene. Use the woosh sound block as it zooms past.

1 → 6 1 1 1

Submit ↑



## 5. On the hunt!



### On the hunt!

Wolves have such powerful noses. They can smell another animal from more than a mile away! Your wolf sprite is hungry and smells a hamburger. Program the wolf to move around the scene to find the hamburger. Use a sound before reaching it.

1 10 1 1



Submit ↑



## Answer Keys & Solutions

### Questions

#### 1. What can you do with the sound blocks in your program?

MULTIPLE CHOICE

**Correct Answer:**

- A. Change the size of a sprite ✗ Incorrect
- B. Make your sprite move ✗ Incorrect
- C. Add sounds to your program ✓ Correct
- D. Hide your sprite ✗ Incorrect

#### **Explanation:**

These blocks let you make your sprite make noise.

#### 2. If you want to make your sprite say something, which block should you use?

MULTIPLE CHOICE

**Correct Answer:**

- A. Pop ✗ Incorrect
- B. Click ✗ Incorrect
- C. Tadah ✗ Incorrect
- D. Record sound ✓ Correct

#### **Explanation:**

This block lets you record your voice.

#### 3. Which block lets you make your sprite jump with a cool flying sound?

MULTIPLE CHOICE

**Correct Answer:**

A. Tadah

✗ Incorrect

B. Woosh

✓ Correct

C. Click

✗ Incorrect

D. Pop

✗ Incorrect

**Explanation:**

This block is great for superhero sounds.

#### 4. What could you use the tadah sound for in your program?

MULTIPLE CHOICE

**Correct Answer:**

A. To make the sprite move

✗ Incorrect

B. To play a sound when something goes wrong

✗ Incorrect

C. To celebrate when something good happens

✓ Correct

D. To make the sprite disappear

✗ Incorrect

**Explanation:**

This sound is often used to show excitement or success.

#### 5. True or False sound block make the sprite change what it looks like?

MULTIPLE CHOICE

**Correct Answer:**

A. True

✗ Incorrect

B. False

✓ Correct

**Explanation:**

sound blocks are how sprites sound

### 1. Sounds Typing Race

*Typing game - no answer key needed. Students practice typing the provided content.*

### 2. Sounds Categories

**Category Solutions:**

#### Category 1: Use a Different Block

- The sprite repeats an action 10 times.
- The sprite waits for 2 seconds before moving to the next location.

#### Category 2: Use Sound Block

- You want your sprite to make a "woosh" sound when it flies through the air.
- The sprite completes a level, and you want to hear a "tadah!" sound.
- You want your sprite to make a "click" sound every time it collects a coin.

**Scoring:**

- Gold: 1 attempts or fewer
- Silver: 2 attempts or fewer
- Bronze: 3 attempts or fewer

*Students must sort items into their correct categories.*