

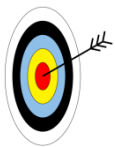
Sound and Communication





Worksheets provide guidance throughout the program creation.

Mind the following symbols that..

- ✗ structure your work progress and show subgoals,
- ✗ provide help, mark and explain challenging and important notes
- ✗ include assignments and activities.



Jigsaw Method: Sound and Communication

In this section you will learn how to create **characters** with  (in the example the , and how they can communicate with each other. Are you curious? Well, let's get started!

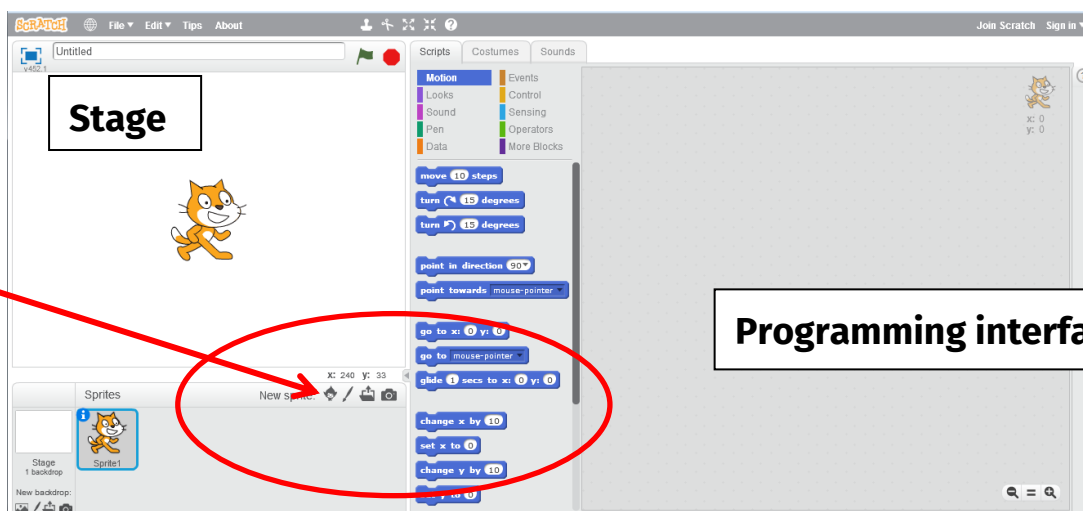


Place a second figure:

- For this purpose, simply click on this button:



Menu

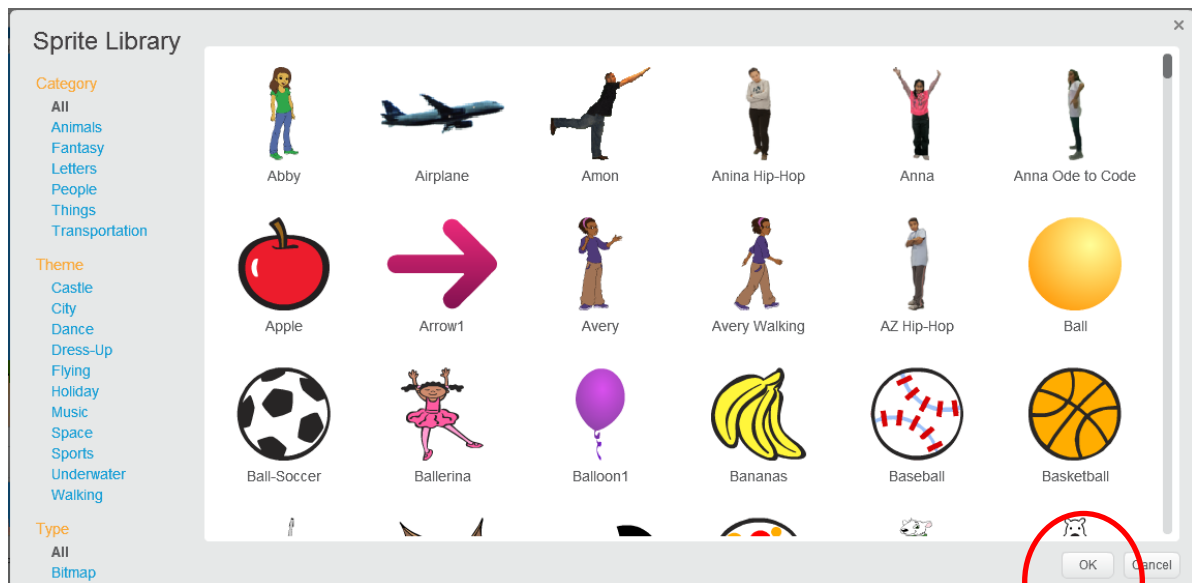


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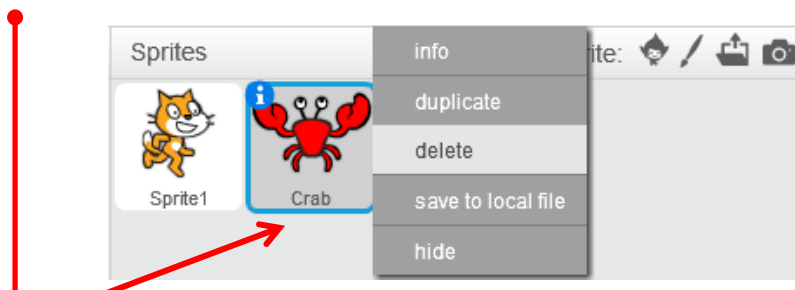
The **character library** opens.

- Browse the character library and select a character by clicking on the left mouse button.



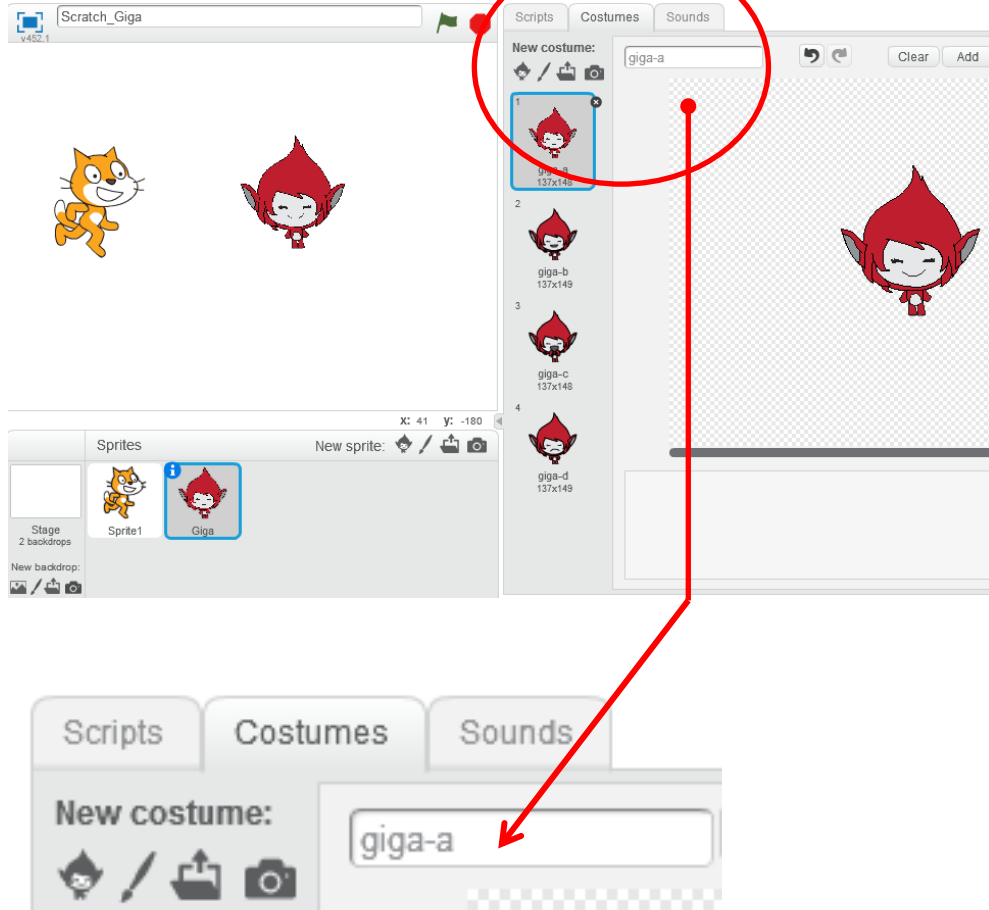
- Confirm your selection with a *double click*, or click the "OK" button.


If you do not like your selection, you can delete it here by right-clicking on the character.



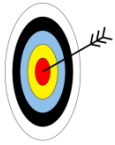
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Now create a matching **costume name** for your characters or change the **existing costume name** (here "giga-d").

**Attention:**

This symbol  is available twice! Click on this icon to the right of your stage to create a **new character**. By clicking on the symbol in the Costumes menu, you can only assign a **new costume** to your character.

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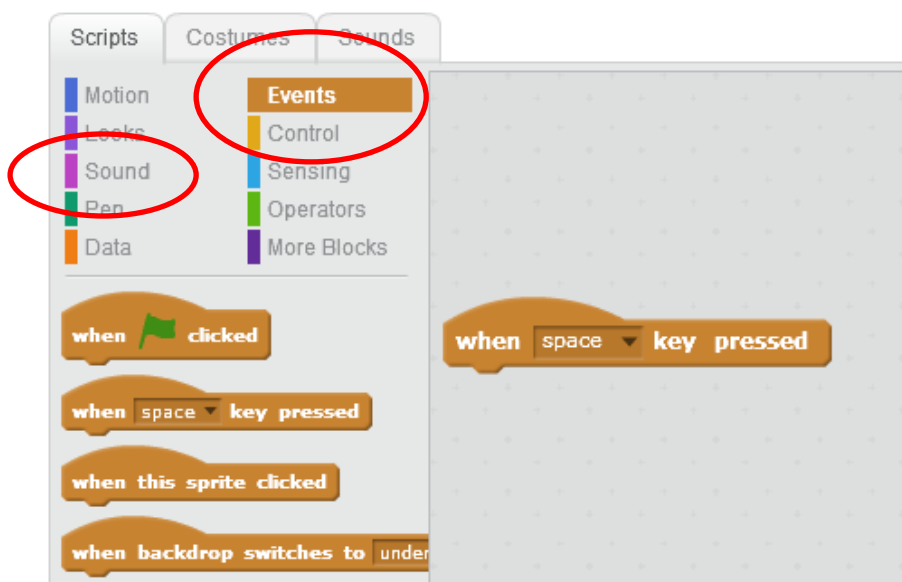
Produce a Sound:


Now let's hear something from our characters! To do this, we need some puzzle pieces from **Events** and **Sound** from the *scripts* menu.



To let your character (for example the cat) know when it starts, we have to set a **starting condition**.

For this purpose, select the start condition "If-key-space" from **Events** in the *scripts* menu, and drag it to the right of your **programming interface**.



- Choose the sound function and let the  play its "meow" (if you have a different character, you can see on the next page how to select a suitable sound).
- Test your program by pressing the **spacebar**.
- Now let the cat try out an **instrument** and test your program again. 😊

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What does this program do? Explain in your own words!



- Write down your thoughts here:

```

when space key pressed
  play sound meow
  wait 1 secs
  play drum 1 for 0.25 beats
    
```

- Now try to combine several **Sounds** in a **program**.

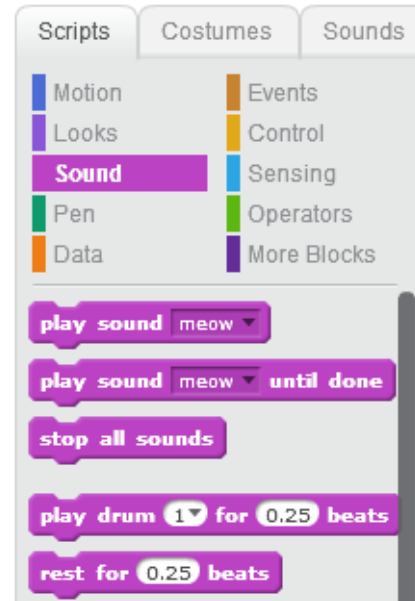


Now find a new **sound** from the **sound library** in the sound menu. Click on the speakers for this purpose.

Sound and Communication

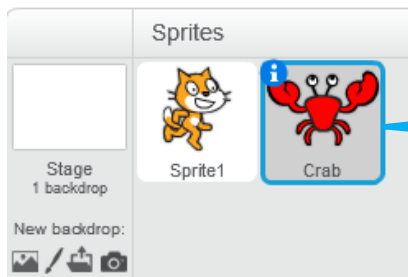


Choose the **Sound** function in the *scripts* menu. You will find your chosen sound again.

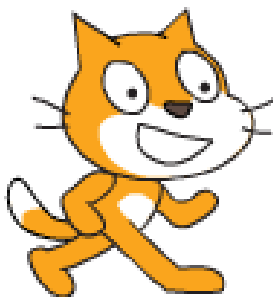


Watch out! The new sound only applies for the character you worked with last!

If you want to use a new sound for **another character**, you have to **create it again!** Just click on the character with which you want to create sounds.

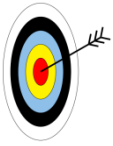


Click on me to assign a new sound to me!




Well done!
Let's have a short
break!!

Sound and Communication



Sending messages:

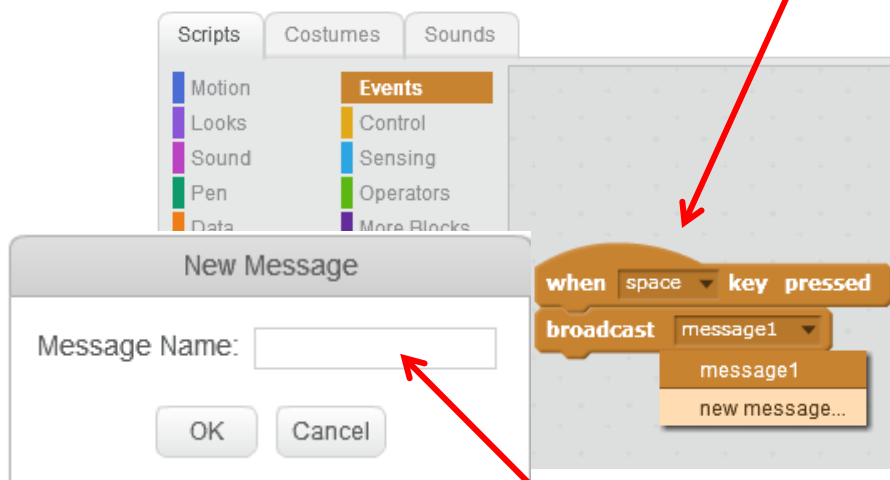
Now you have to decide which of your characters is supposed to **send** a message and who should **receive** it. The sender's script is written first.

In this example, we are going to start with the , with which you are already familiar with. It is going to be the **sender**.

We need puzzle pieces from **Events**, **Control** and **Sound**.



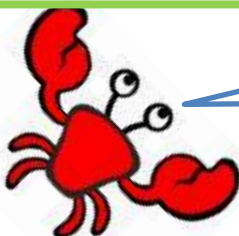
- Drag the puzzle pieces "If-key-spacebar-pressed" and "broadcast-message1" from the **Event** function into your programming interface.
- By selecting **send message1** **an alle** you can choose "new message".



- Write the **message** you want to send in the pop-up window.
- If you press the spacebar now, your message will be sent.



What do you have to do in order to let the recipient feels appealed now?



Precisely! You have to write a program to me as a receiver, so I know I should receive something.

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- Search for the recipient's the start condition for you recipient in **Events**,



- Add a "wait-1-sec" from the **Control** function to the start condition
- Lastly, choose a puzzle piece from **Sound**.
- Test your programs!

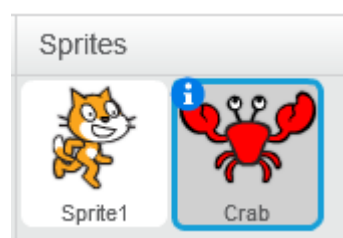


Please make sure to use the **same starting condition** for several, parallel programs of the **transmitter**.

(In the example, the empty key)

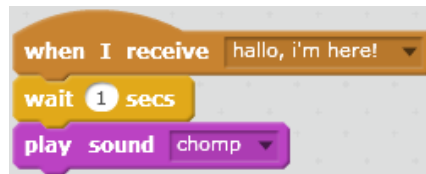
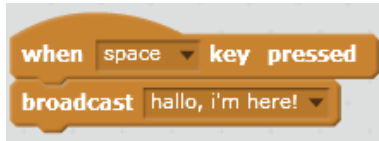
All programs - of sender and receiver - can be started **at the same time** with one click.

Make sure you have also marked the character you want to write a program for!



If your programs
look this, you did it
right!

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Additional task:

Try to have your character play several **sounds** after receiving the message. You can also create one or more other characters and let them respond to your message with a sound; You will have an orchestra so to speak. 😊

*Congratulations,
you have reached your goal!*

