

Overview



This activity fulfills **Stage 1, Requirement 2** of the **Digital Maker Staged Activity Badge** (Create a graphic for a computer game, app, or website. This could be a background scene, character, or other image.) Using the Paint Editor tool in Scratch, young people will draw a new campsite object and create their own campsite picture.



Click on objects (sprites) in the campsite to rotate through different pictures (costumes). You can export the campsite images to share with the section, with parents/guardians, or on social media.

Key messages

- Creating images (graphics) is part of being a digital maker.
- It's more fun to create your own images than to use someone else's.
- You need to think carefully about how your image fits into a project, e.g. size, position, similar style to other images.
- In the Scratch program, characters and objects are called sprites, and they can have different costumes.

Safety

If working online, tell young people to ask for permission before viewing any other websites.



30 minutes



Flexible (ideally two young people per computer). Suitable for Beavers & Cubs



If you're running this activity without access to WiFi, you'll need to download the software and program ahead of time (see below); try out the activity yourself before running the session.



Wherever you have access to computers

You will need:



- You will need laptops or desktop computers (tablets like iPads do not work with this activity).

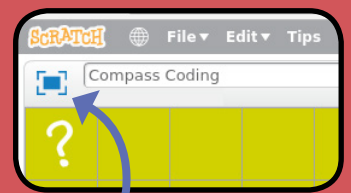
If your meeting place has WiFi

Run Scratch online in a web browser with an internet connection and open this link: rpf.io/camp. You may get a message to launch Adobe Flash player. Click on this. If you get a pop-up, click 'Allow'.

If your meeting place doesn't have WiFi

You'll need to download the project ahead of time. When you have internet access, open this link: rpf.io/camp. Click to exit full-screen mode, then click 'See inside'. Go to the File menu and select the option to 'Download to your computer'. To run the program, you'll also need to download Scratch from the [Scratch download page](#) to the machine you're using.

When you're ready to run the activity, open Scratch. Then open the project and go into full-screen mode.



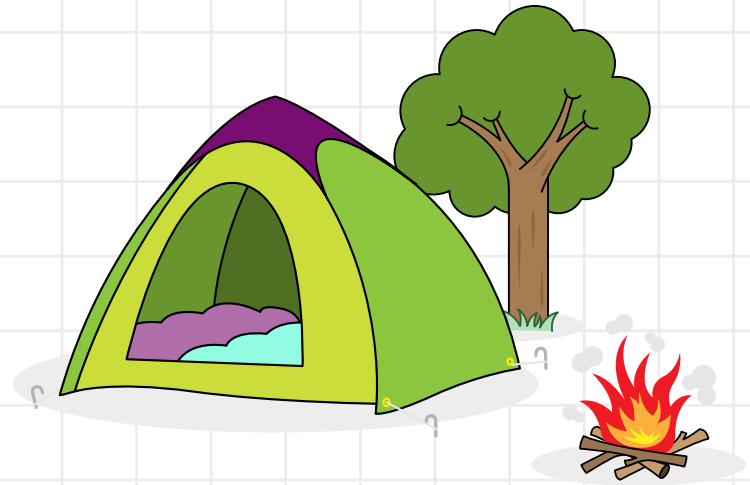
Click for full-screen



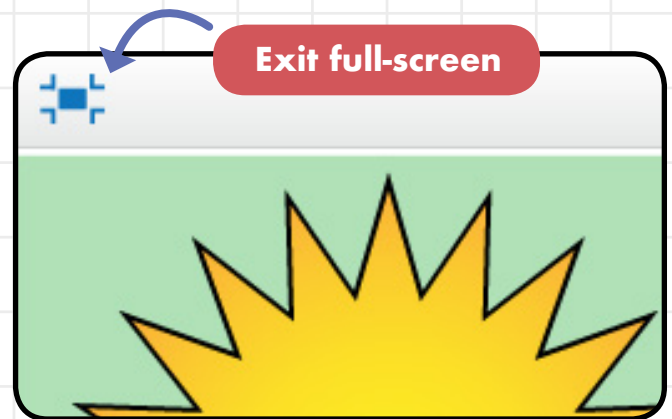
Leader instructions



- 1** Discuss the fact that computer programs (including apps) often need pictures — we call these images or graphics. Someone has to create these images.
- 2** Explain that the 'Create a campsite' app lets you design your own campsite image.
- 3** Demonstrate the project on one computer. You can access the project by visiting rpf.io/camp or by opening the 'Create a campsite' Scratch project and clicking the icon for full-screen mode. Click on campsite items to show different costume options, and allow young people to try out clicking on objects themselves to change the campsite scene.
- 4** Explain that you can easily create lots of different campsite images using this app. Imagine how long it would take to draw them on paper! Art created on a computer is called digital art. Creating digital art is part of digital making.



- 5** Explain that the app you're using is created in Scratch, a program and website for creating your own apps and projects.
- 6** Click the icon to exit full-screen mode, and then, if using Scratch online, click 'See inside'. This is what a Scratch project looks like. The code has already been written for you. In this activity, you will be using the paint editor in Scratch. The different campsite items are called sprites and they have different costumes.



Alternatives



- Draw objects on paper, then use the camera in Scratch to take a photo of the drawing. This is useful if you only have access to one computer (with a camera).
- As a tech-free alternative, you could print out the large picture of the campsite and then stick on hand-drawn objects with sticky tack. Talk about how apps are often designed on paper first.

7 Explain that it's more fun to create your own graphics than to use images someone else has created. Young people are going to create their own images that will then be used as alternatives when you click on campsite objects.

8 Walk the young people through the 'Create a campsite object' instructions to add a new object, explaining what you are doing throughout.

- For Beavers, use the option to 'colour an object'. Discuss choice of colours and what they would put on a campsite sign.
- For Cubs, use the option to 'draw your own object'. Discuss the kind of objects you would find at a campsite.
- After creating your new object, demonstrate what it looks like in the app by clicking the full-screen mode icon to show how the new object comes up as an option when you click.

Adaptability



- Young people who are not able to design their own objects can use existing objects to create their own campsite design.
- Young people with experience in Scratch can try adding a new kind of object (sprite) to the campsite.



Community and Sharing

When they have finished, each young person should show their campsite design to another young person or a leader. If working one at a time, they can show their finished results to the next person.

9 Explain to the young people that it's time for them to have a go at using the program themselves. Each young person will be adding their own item to the campfire scene. They can work individually if you have access to one computer per person. They can also work together, taking turns in small groups.

10 When they're finished, ask your young people to show their campsite creations to the wider group, discussing what they've learnt.

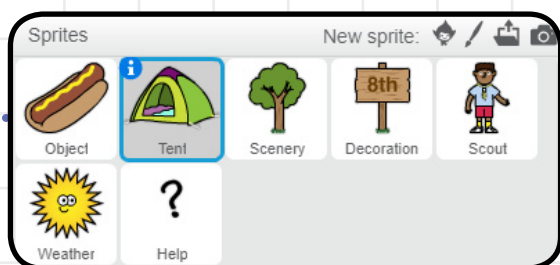
11 Recap that by using the Scratch paint tool, they can add their own graphics to games, interactive stories, and art projects, and that digital art is part of digital making.

First try out the project in full-screen mode. Click on an object (a sprite) to change it to an alternative. When you are ready to create your own object, click the 'exit full-screen' icon. If you are using Scratch online, then you may also need to click 'See Inside'.

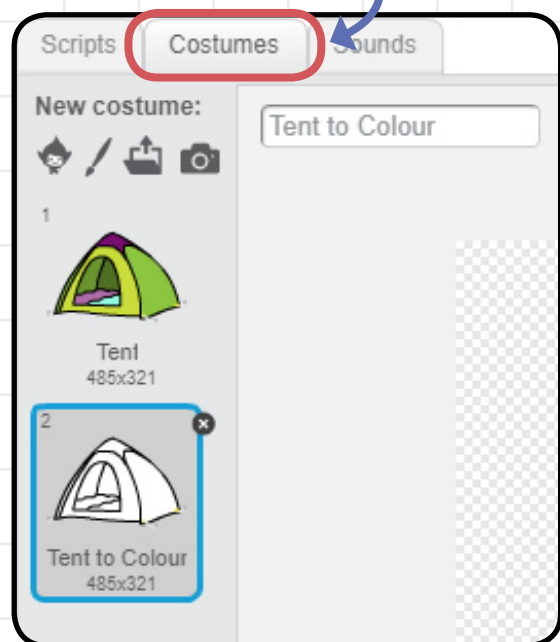
Colour a campsite object – Beavers

You can use the paint tool in Scratch to make your own versions of objects with different colours, and to change the text on the sign.

1 Click on the Tent sprite below the Stage.

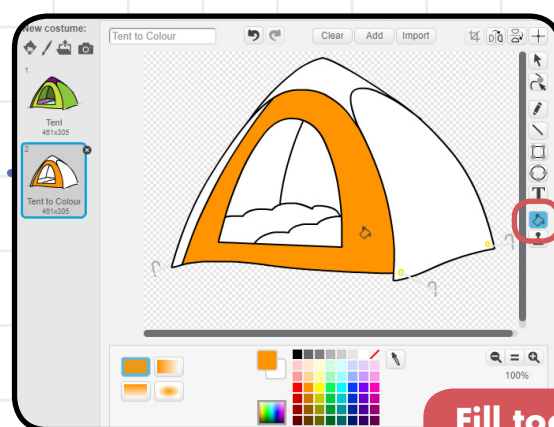


2 Click on 'Costumes' and then on the black and white tent.



3 To change the colour of part of the tent:

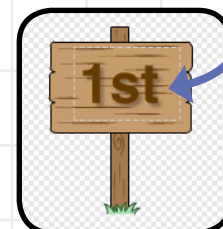
- Click on a colour
- Click on the 'Fill' tool
- Click on the part of the costume that you want to change



4 You can also change other sprites in the same way. Just use the fill tool to change their colours.

Click to change the writing

5 You can also change the writing on the sign. Click on the '8th' text. You can delete it and type your own text, such as '2nd' or '9th'.



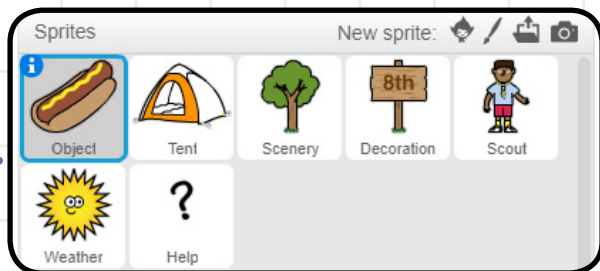
Tip

If you want to make a copy of a costume, click on the stamp tool and then on the costume.

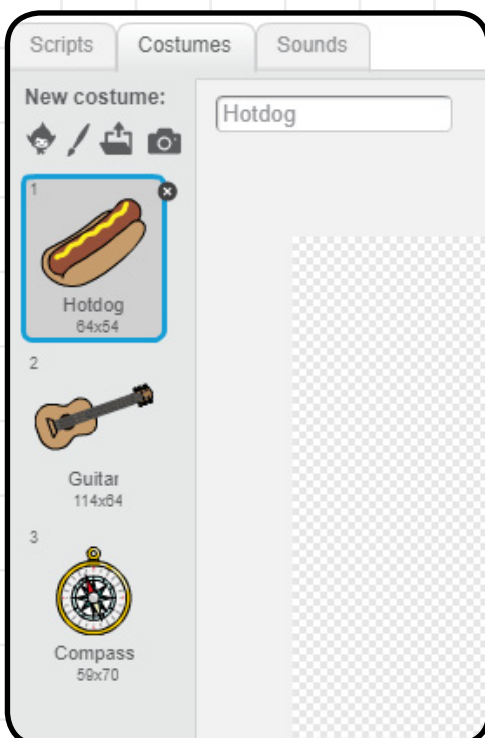
Paint a campsite object — Cubs

Think of an alternative object for the Scout to hold. You could add in an item of food, a rope, or a map for them to use.

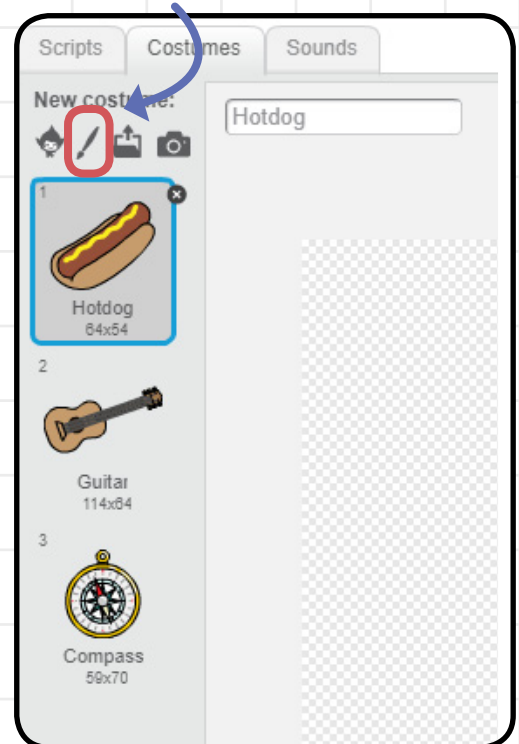
- 1 Click on the Object sprite below the stage to add a new alternative picture (a costume).



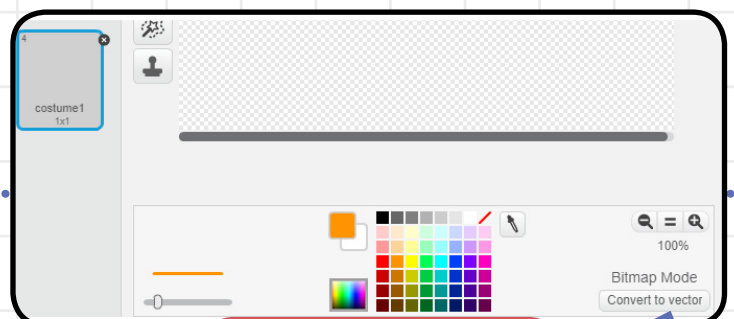
- 2 Click on 'Costumes'. You will see the alternative costumes for the Object sprite.



- 3 Click on the paintbrush to create a new costume.



- 4 Click on the 'Convert to vector' button to switch to the vector editor. This allows you to move shapes around after you have created them.



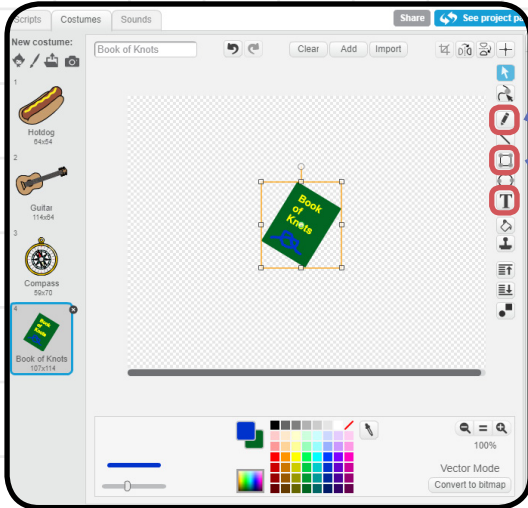
Click to switch to the vector editor

Instructions

Handout

Cubs 2

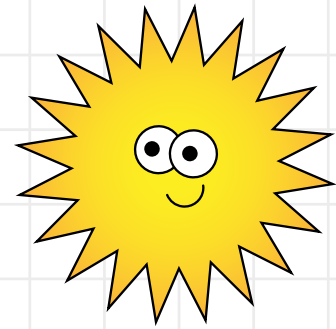
- 5** Use the drawing tools to draw and create shapes and text.



Pencil tool

Rectangle tool

Text tool



Tip

Don't move or resize the objects on the stage, because that will move all of the costumes for that sprite.

Click on an object and use the 'handles' to resize or rotate it.

- 6** Use the drawing tools to draw and create shapes and text.



- 7** Choose the options you like for all of the campsite objects, and then right-click on the Stage and click on 'Save picture of stage'. Include your name in the title of the picture, and ask your leader where you should save it.



- 8** If you have time, you can create more objects and campsite scenes. You could also change the tent design, or change the weather, or add a table or barbeque as scenery.

Alternative

You can also draw objects on paper and then use the camera to take a photo. You'll need to use the eraser to remove the parts of the photo that you don't need.

Click on the camera to take a photo of the drawing

Use the eraser tool to remove the bits you don't want

You can change the size of the eraser

