



Contact with aliens

Life in space

time

70 minutes

learning outcomes

To:

- know that signals are sent into space to try to contact aliens
- think how you could send a message to aliens

end product

- a sheet of paper with a message to an alien

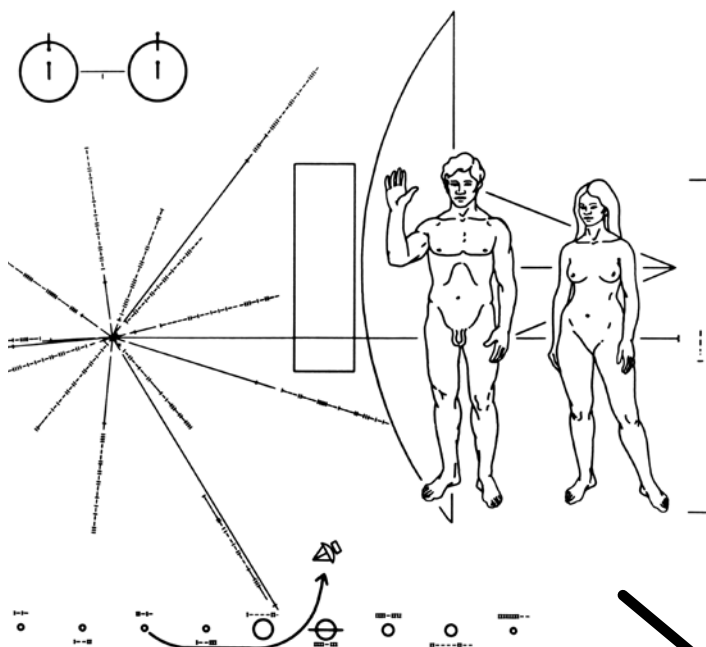
materials needed

- A4 paper
- white wax crayons or white candles
- Ecoline (watercolour ink)
- brushes



Signals for aliens 10 min.

Explain that we live on Earth. Besides the Earth there are lots more planets in space. Ask the children if they think there are any other living beings (aliens) living in space. Why / why not? Explain that we have not discovered any aliens yet. But we might one day. From time to time scientists send things into space in an unmanned spacecraft in the hope that they will be found by aliens. These include audio and video recordings which are sent into space to let aliens know that we are here on Earth and how we live. Show the picture of the Golden Record below.



Good to know. In 1977 the Voyager Golden Record was sent into space in the space probes Voyager 1 and 2. This is a gramophone recording containing images and sounds of life on Earth. The sounds include wind, thunder, animal noises, music from different cultures and times, and spoken messages in 55 languages. The record is intended to let aliens know that we are here. Because the universe is very big, the chance of aliens actually finding the record is very small.

Ask the children if they think that the aliens would be able to decipher the signals?
Why / why not? Discuss the fact that aliens might speak a different language.
How can you communicate without using a particular language?



The children explore ways of communicating with aliens.



Make contact 50 min.

Contact through sound

Explain to the children that there is a way to make contact without talking, such as using Morse code for example. This works by making long and short bursts of sound. Once people have learned this 'language' they can understand what the message means. Let the children hear a short piece of Morse code.

For example:

• • • • • • — • • — • • — — —

h e l l o

Organise the children into pairs. Explain that child 1 is going to try to tell child 2 something without using any words. Child 1 takes a moment to think about what he or she wants to say and then tries to convey the message using sound.

They could do this by agreeing beforehand what certain sounds mean.

The children write their own Morse code message at Task 1a on the worksheet.

The children can make the sounds by thinking up their own version of Morse code and either tapping a pencil on the table or making various sounds with their mouth. Does child 2 understand the message? Encourage the children to swap tasks.

Discuss how the experiment went. Would an alien understand the message?

What would they do if the alien didn't have any ears? How could you communicate then? In the next task the children will communicate a message using images.

Contact through images

Ask the children what they would like to tell the alien. They are going to do this using images. They could devise a secret code, draw a picture, or write a message using wax crayon, and watercolour ink. Encourage the children to think about how they can explain to the aliens how they should decipher the message. Give each child a sheet of white paper, a white wax crayon or candle and some water-colour ink. The children use the wax crayon or candle to write on the paper. Because both the paper and the crayon are white, you can't see the message. The children decipher each other's message. They do this by using the brush to paint a thin layer of watercolour ink over the sheet of paper. The paper will absorb the ink except where the wax message is written.

Tip. Prepare a sheet of paper with Morse code messages and encourage the children to use it to practise. Can they decipher the messages?



The children complete Task 1b and 1c on the worksheet, indicating the method they believe is the best way to communicate with aliens.



How do you tell your message? 10 min.

Ask the children what they have made. What did they want to tell the aliens? How did they do it? Was it easy for their partner to decipher the message? What do the children think is the best way to send signals? Do they think sounds are the best? Or a drawing or a secret language?

Or something completely different? Discuss why they chose a particular method.

The children complete Task 2 on the worksheet.



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worksheet

Contact with aliens

1 *Make contact*



What would you like to tell an alien?

Write it in code.

write in
code HERE
what you
would like
to tell the
alien

b Can you say something using sound? **yes / no**



c Can you say something by drawing it? **yes / no**

CIRCLE
the correct
answer

CIRCLE
the correct
answer

2 How do you tell your message?



How would you make contact with an alien?

Put a tick against it



TICK how you would make contact with an alien

