

Procedure for team A:

- Maps are often used to show the location of various objects on the earth's surface. In this activity you will be using a map of a mountain area where four climbers are lost. In order to pinpoint the exact location of an object on a map, gridlines are often used. The map that you will be given uses the letters A-I and numbers 0-6 to establish the grid.
- Generally, search teams split up the area to be searched in order to reduce work load and to make for a more thorough search. You will be required to search the area from A to E and 0 to 6.
- Remember to stay with your partner. Decide who will store the encoder data (enter data into the storage sheet provided) and who will transmit it. The encoding itself should be done together. The person who is transmitting data should keep the flashlight.
- Familiarize yourself with your tools and materials. Try to determine the location of the rocks on the map based on the grid. Did you understand the letters and numbers on the map? How can you combine them to make something useful for the other side to understand?
- Look at your code table. For this activity you are going to keep the flashlight on for 3 seconds to represent a '1' and 1 second to represent a '0'. Instead of turning the flashlight on and off after every digit use your hand to block the light from the flashlight after each digit is transmitted. Try sending a couple of practice messages to your partner.
- Encode the message you need to transmit. This message needs to have the location and condition of both of your climbers. When communicating indicate condition and then the location. For e.g.: FOUND INJURED B6 could be your first message. As a break between words / characters use a slow up-down movement with your flashlight to indicate the end of a word or character and cover the flashlight immediately. Now transmit the message you encoded.
- Now wait for the other team to transmit data, receive the location & condition of the other team's climbers. Record this in the 'storage for decoder' section of your data sheet. Proceed to decode the signal.
- Now transmit the location that the other team should meet you at in order to get picked up by the helicopter. Choose the location based on which team has more injured climbers and the spot almost midway for both teams to reach. Wait for an acknowledgement from the other side.
- Do not forget to record every message in your storage sheet. This is the best way to ensure having a complete log of your mission.

Procedure for team B:

- Maps are often used to show the location of various objects on the earth's surface. In this activity you will be using a map of a mountain area where four climbers are lost. In order to pinpoint the exact location of an object on a map, gridlines are often used. The map that you will be given uses the letters A-I and numbers 0-6 to establish the grid.
- Generally search teams split up the area to be searched in order to reduce work load and to make for a more thorough search. You will be required to search the area from E to I and 0 to 6.
- Remember to stay with your partner. Decide who will store the encoder data (enter data into the storage sheet provided) and who will transmit it. The encoding itself will have to be done together. The person transmitting keeps the flashlight.
- Familiarize yourself with your tools and materials. Try to determine the location of the rocks on the map based on the grid. Did you understand the letters and numbers on the map? How can you combine them to make something useful for the other side to understand?
- Look at your code table. For this activity you are going to keep the flashlight on for 3 seconds to represent a '1' and 1 second to represent a '0'. Instead of turning the flashlight on and off after every digit use your hand to block the light from the flashlight after each digit is transmitted. Try sending a couple of practice messages to your partner.
- Encode the message you need to transmit. This message needs to have the location and condition of both of your climbers. When communicating indicate condition and then the location. For e.g.: FOUND INJURED B7 could be your first message. As a break between words/ characters use a slow up-down movement with your flashlight to indicate the end of a word or character and cover the flashlight immediately. Now transmit the message you encoded.
- Now wait for the other team to transmit data, receive the location & condition of the other team's climbers. Record this in the 'storage for decoder' section of your data sheet. Proceed to decode the signal.
- Now receive the location that the other team wants you to meet at in order to get picked up by the helicopter. Send them a message acknowledging that you have received the location.
- Do not forget to record every message in your storage sheet. This is the best way to ensure having a complete log of your mission. Inform the teacher that your mission has been completed.