

Paper Coding Treasure Hunt

Do you have a favourite video game? Lots of people work together to create new video games. Software engineers (a type of electrical engineer) or other computer programmers must write the codes for the graphics and all the actions you can do in the game. In this activity, you will write a basic code, using logic similar to what software engineers use.

Time: 15 minutes

Materials Needed:

- 16 blank note cards (or paper cut up into rectangles)
- Notebook paper
- Pen or pencil

The Steps:

1. On one note card, draw a treasure chest or write the word *treasure*.
2. On a second note card, write the word *start*.
3. Now lay all the note cards, including the treasure and start cards, in a square. With 4 note cards going across and 4 going down. It doesn't matter where you place the treasure or start cards as long as they are not right next to each other.
4. Your goal is to write a very simple code to get someone from the start card to the treasure card. On your notebook paper, write the word *start*. This is the first step of your code.
5. Look at where the start code is and determine what the second step should be. On the next line of your paper, draw an arrow to show your friend which way to go.
6. Continue using arrows to show which way to go to get to the treasure. You should draw one arrow per line on the notebook paper. Each arrow represents moving one note card. So, a ← means to move one note card to the left, and a ↑ means move one note card up.

