

Name: _____

Date: _____

Project/Unit: A Glimpse into Cyber Security

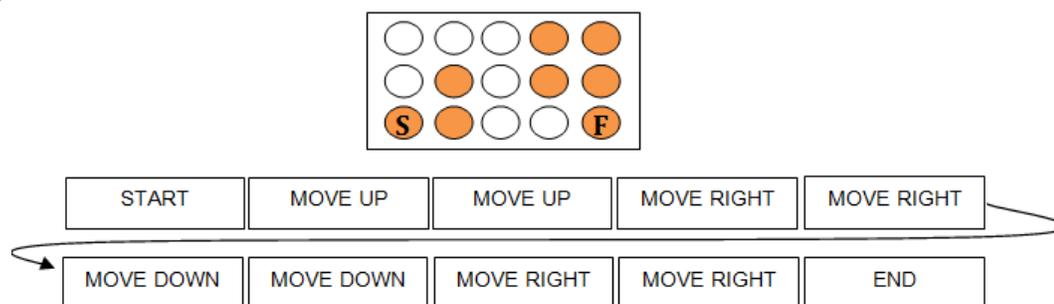
Lesson: 4

Follow the instructions below to assemble and use the Puppy Programming models.

1. Cut out the cards and puppy & ball patterns.
2. To create the **puppy game piece**, fold along the dotted lines. Peel the paper off both sides of a double-sided adhesive circle and attach the ends together to form a triangular prism, as shown below. Using another double-sided adhesive circle, attach the puppy piece to a cork. Create the **ball token** by attaching a ball pattern to one side of the flat game token.



3. Choose the orientation of the board, three up and five across or vice versa.
4. Place the puppy game piece at the desired starting point and the ball token at the finish point.
5. Create an open path by using the corks as barriers to fill the spots and block the path. The path should have no diagonals.
6. Choose and arrange the cards to direct the puppy game piece from start to finish without running into any blocked spots. The program completes when the puppy lands on top of the ball. Once cards are selected, place them in order with the “start” card at the beginning and the “end” card at the end. The ordered cards make up the program (see below).



7. Once the program is created, carefully create a stack, maintaining the program order. Replace the puppy game piece at the starting point. Exchange boards and program cards with another student team.
8. The new team runs the program by moving the game piece around the board, according to the direction and order of the cards. If the program does not work, discuss and debug (correct) the program so the puppy reaches the ball.



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Think about what you learned in this lesson and answer the questions below.

What is a computer program?

Why are computer programs important?

What are procedures?

What was the difference between using the basic cards and the advanced cards?

How might knowing about programs help improve cybersecurity?