Year 6 computing   Autumn 1

Exploring basic procedures

Year 6 discussed the meaning of 'procedure' and some of examples of these.

- A set of instructions grouped together to carry out a task.
- Run a procedure by using its name.
- Procedures can be run/used lots of times.

Some examples that the children came up with were every day procedures that our brains know what to do. E.g. walking, getting dressed, eating, jumping.

They put this into steps as if it was code.

Define **walk**
Move right leg forward
Wait
Move left leg forward
wait

Define **breathe**
Breathe in
Wait
Breathe out
wait

Define **eat**
Put food in hand
Lift hand to mouth
Put food into mouth
Loop until a paste
　　　chew
swallow

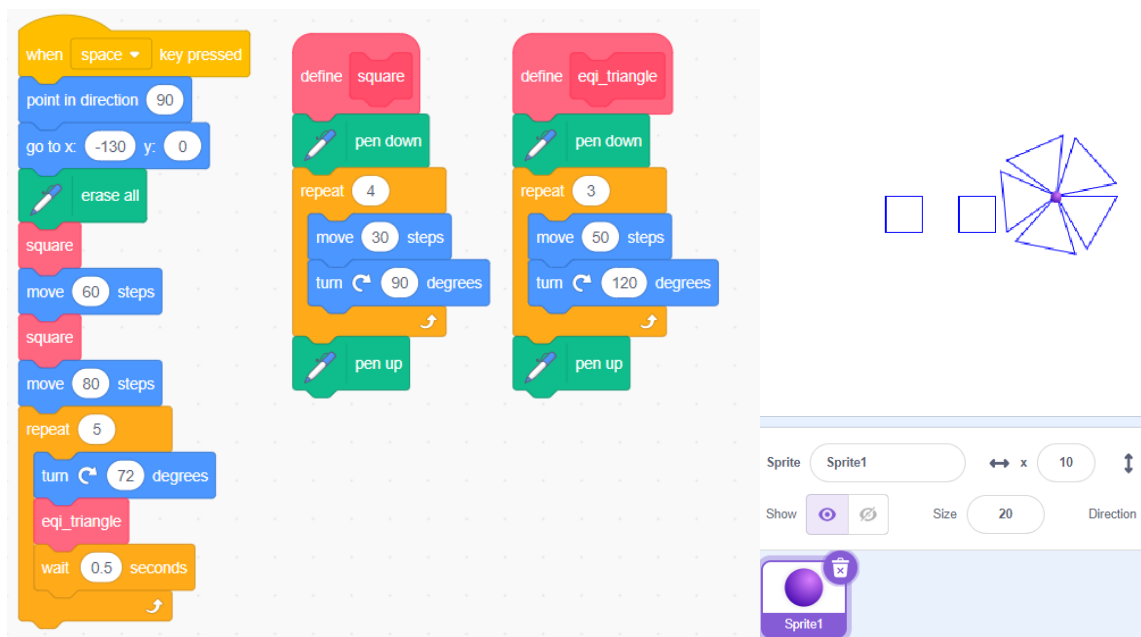Loop always
　　breathe
　　if need to go somewhere
　　　　walk
　　if hungry AND food near
　　　　eat

Next, the children explored a code on Scratch that had already been made. Using the sheet, they had to explore how different procedures were carried out.

Use the Program

Run the program as many times as you want. Now look at the code.

Work with a partner to answer these questions.

1, How many times in the main program (starts when space key is pressed) is the **square** procedure used? **2**

2, When the square procedure is run. How many times will it move 30 forward? **4**

3, How many times in the main program is the **eqi_triangle** procedure used? **5**

4, What shapes do the two procedures draw? **Square, triangle**

5, Which shape would have the longest perimeter? **Triangle**

6, If we removed the loop from the **square** procedure what would the **square** procedure draw? **It makes lines**

After exploring the programme, they had a number of modifications that they needed to add to the programme.

Modify

What happens when you remove the two **pen up** blocks from the procedures?

it just keeps drawing.

What would you change to **increase the distances** between the squares?

change move steps and

What would you change to make all the squares **larger**?

Change the move steps

What would you change to make all the triangles **smaller**?

that make the move steps lower

What would you change to make the square **only draw three sides**?

turn degree to 0. repeat 3

Modify

What happens when you remove the two **pen up** blocks from the procedures.

Makes a long lasting pen.

What would you change to **increase the distances** between the squares?

steps

What would you change to make all the squares **larger**?

press steps and make a high number

What would you change to make all the triangles **smaller**?

press steps and make a high number.

What would you change to make the square **only draw three sides**?

change the square to repeat 3 times