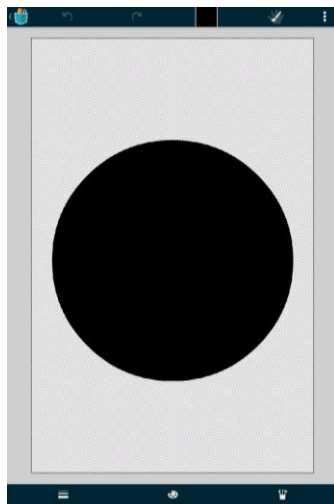
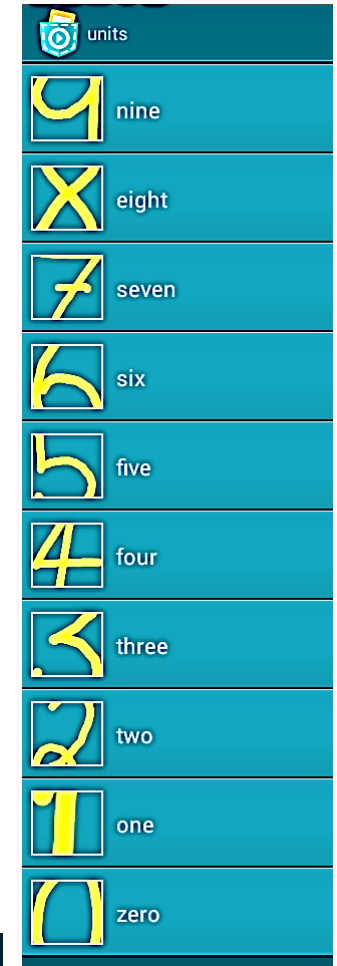
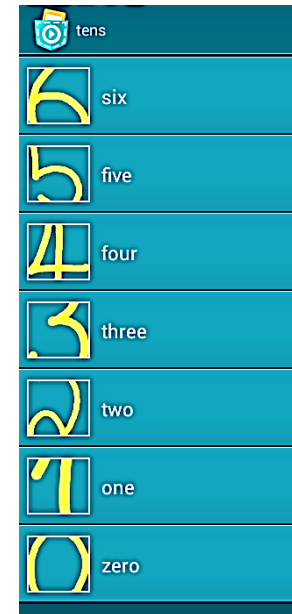
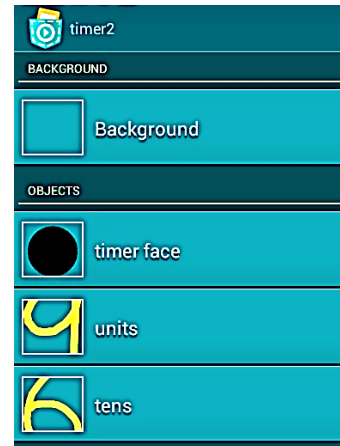
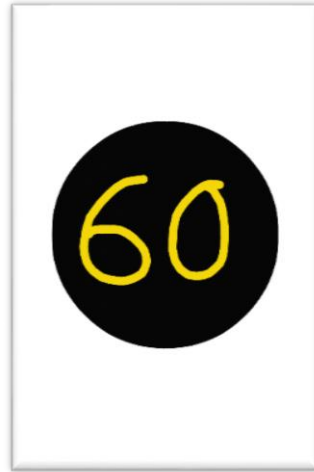


Countdown timer component mini-game

This game helps the pupils identify that a timer is a key game design feature and how it could be used. We are creating a 60 second timer as a countdown. Depending on the pupil's level, this game can be downloaded and partially adapted rather than building it from scratch. The way you use this timer is up to you, though it could be used to do a task in a set amount of time.

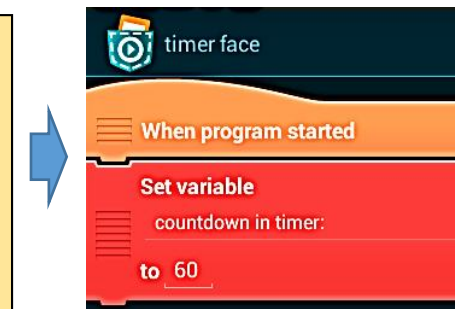


First, create the 'timer face' in Pocket Paint (just by using the circle tool). Save at the top left to save the whole screen.

Next, create the units and tens. For the tens, start at '6' and add six more looks renaming them when created. (see image)

For the units, start at '9' and add nine more looks renaming them when created (see image).

Once you have created all the objects and looks, add the following bricks to the Timer face object:
Control = When program started
Data = Set variable *countdown* to 60 (When the program starts, numbers countdown from 60).
 (For more information on setting variables, see worksheet: **Creating the variable component mini-game**).



Countdown timer component mini-game cont'd

In the *tens* object add the following bricks:

Control = When program started

Motion = Place at X: Y:

(Set the position of your object)

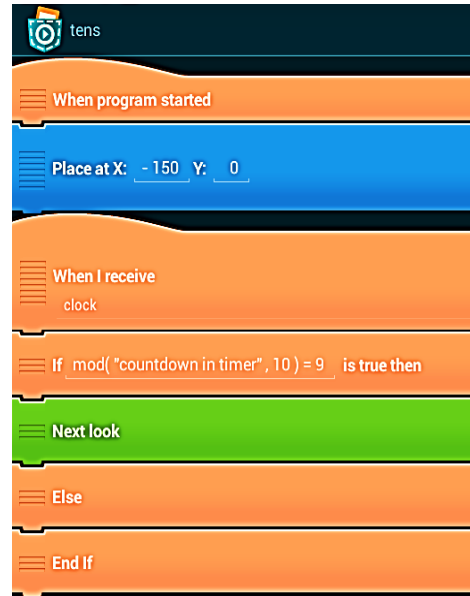
Control = When I receive
(Message name)

Control = If $\text{mod}(\text{"timer"}, 10) = 9$ is true then

Looks = Next look (the timer decreases)

Control = Else (this will create an 'end if' brick below)

Control = End if (will automatically appear).



In the *units* object add the following bricks:

Control = When program started

Motion = Place at X: Y:

(Set the position of your object)

Looks = Switch to look - zero

Control = When tapped

Control = Forever

Control = Wait 1 second

Data = Change variable *countdown by -1*

Control = If $\text{"timer"} \geq 0$ is true then

Control = Broadcast
(message name)

Control = Else (this will create an 'end if' brick below)

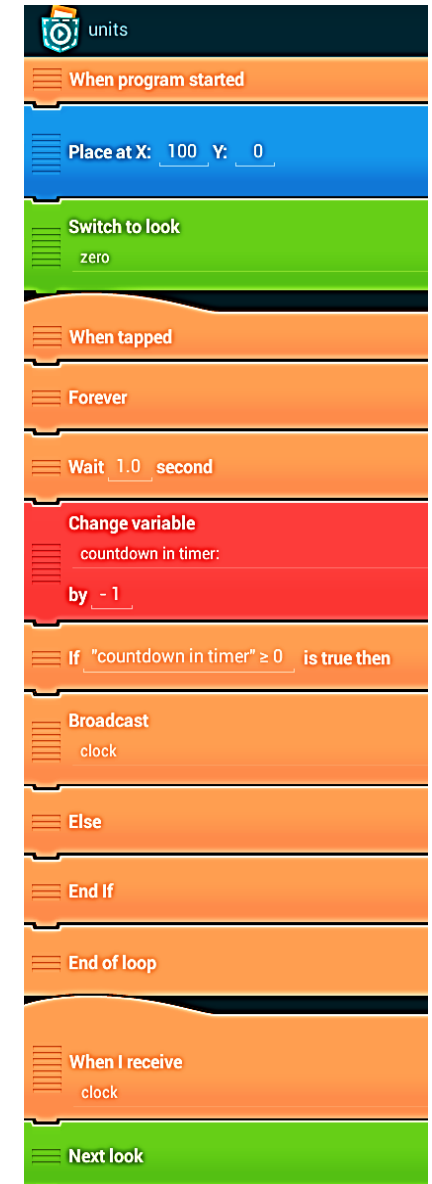
Control = End if (will automatically appear)

Control = End of loop

Control = When I receive

(Message name)

Looks = Next look (the timer decreases).



If statements and functions

To create the code in the control brick - *If true* - you must first tap on the value '1' which will take you to the formula editor.

Tap *functions* in the menu and find *mod(1,1)*.

Within the values (1, 1) insert the variable "timer" from **Data** in the menu, and the value 10.

The *mod* operation finds the remainder of two values. In this case, when the countdown reaches 09 - the tens will no longer change look.

