

Lesson 4: PicoH Pet

I can use several variables in a program to make PicoH behave like a robot pet





full tummy



warm





Full tummy 0 to 10
Warm 0 to 10

Activity 1

Can you create a variable called full tummy and make it decrease from 10 to 0?

Can you find a way of providing food when the 'f' key is pressed?

File, Save As - picohpet



Activity 1 Example

```
when clicked
  set full tummy to 10
  forever
    wait 1 secs
    change full tummy by -1
```

```
when F key pressed
  change full tummy by 1
```



Activity 2

Can you create a variable called 'warm' and make it increase when the up arrow key is pressed and decrease when the down arrow key is pressed?



Activity 2 Example

```
when up arrow key pressed  
change warm by 1  
  
when down arrow key pressed  
change warm by -1
```



Activity 3

Warm 10	Full tummy 10	I'm feeling...
Warm 10	Full tummy 0	I'm feeling...
Warm 0	Full tummy 10	I'm feeling...
Warm 0	Full tummy 0	I'm feeling...

Demonstration

Can we program PicoH to sense the values of the variables and react?



Demonstration

```
when clicked
  forever
    if warm = 0 and full tummy = 0 then
      say I'm cold and hungry until done
```



Activity 4

Can you create *If* conditions for the other possible scenarios



Example: Activity 4

```
when clicked
  forever
    if warm = 0 and full tummy = 0 then
      say I'm cold and hungry until done
    if warm = 0 and full tummy = 10 then
      say I'm cold but I'm not hungry until done
    if warm = 10 and full tummy = 0 then
      say I'm warm but I'm hungry until done
    if warm = 10 and full tummy = 10 then
      say I'm warm and full until done
```



Extension

Can the values of warm or full tummy go outside of the range 0 to 10? Can you find a way of fixing this?

