

Vary the Action



Using variables to track and control the action



Variables remember what's happened. They can also be used to control what happens next.



Here, variables are used to make sure the helicopter always flies just below the aeroplane.

When the plane's height changes the helicopter drops below it to avoid crashing.



3 variables are used:
changeHeight: changes the plane's height
copterHeight: sets the helicopter's height
planeHeight: sets the planes's height

A Digital Content Classroom Project

<http://scratch.mit.edu>

Vary the Action



GET READY

Import the aeroplane and helicopter sprites.

Make these 3 variables

changeHeight
copterHeight
planeHeight

Import the desert background.

TRY THIS CODE

Aeroplane script

```

when green flag clicked
  set size to 75 %
  set y to pick random 0 to 180 - 40
  forever loop
    change changeHeight by 1
    move 10 steps
    if on edge, bounce
    if changeHeight mod 100 = 0
      set planeHeight to pick random 0 to 100 - 40
      glide 0.2 secs to x: x position y: planeHeight
      set changeHeight to 0
  
```

changeHeight and planeHeight variables

Helicopter script

```

when green flag clicked
  set size to 50 %
  forever loop
    move 2 steps
    if on edge, bounce
    set copterHeight to planeHeight - 80
    set y to copterHeight
  
```

copterHeight variable

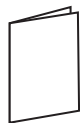
A random number is used to change the planeHeight variable.



Click the green flag to start

DO IT!

Make A Card



1. Fold the card in half.



2. Put glue on the back.



3. Cut along the dashed line.