

Rocket code

Setup:

```
def setup():  
    # Set up your animation here  
    size(400, 400)  
    image_mode(CENTER)
```

Size sets the size of the canvas: in this case 400 wide and 400 high

image_mode(center) sets the positioning of images to be the centre point of each image, which is much easier to deal with

Rocket code

Globe position:

```
# planet  
image(planet, width/2, 400, 300, 300)
```

This is:

1. The image name
2. The Horizontal position: $width/2$ takes width of canvas and div by 2 to place the centre of the image in the centre of the canvas horizontally
3. The vertical position. Top of canvas is 0; bottom of canvas is 400. So 400 places centre of image exactly on the bottom line of the canvas
4. Width and height of the image

Rocket code

The rocket:

```
rocket_position = rocket_position - 1  
image(rocket, width/2, rocket_position, 64, 64)
```

```
# Define variables  
rocket_position = 400
```

- $width/2$ places it in the centre horizontally
- `rocket_position` is the **vertical** position. This is changed by the variable each time through the loop. This is initially set to 400 so it starts exactly on the bottom of the canvas
- 64, 64 are the width and height of the rocket

Rocket code

You can create multiple rockets like this:

```
def setup():  
    # Set up your animation here  
    size(400, 400)  
    image_mode(CENTER)  
    global planet, rocket1, rocket2, rocket3  
    planet = load_image('orange_planet.png')  
    rocket1 = load_image('rocket.png')  
    rocket2 = load_image('rocket.png')  
    rocket3 = load_image('rocket.png')
```

Create multiple variables
Moving at different speeds
would need 3 different
rocket_position variables
as well

```
# rocket  
global rocket_position  
rocket_position = rocket_position - 1  
image(rocket1, width/4, rocket_position, 64, 64)  
image(rocket2, width/2, rocket_position, 64, 64)  
image(rocket3, width/1.5, rocket_position, 64, 64)  
no_stroke()
```

Rocket code

Multiple rockets

```
# rocket
global rocket_position
rocket_position = rocket_position - 1
image(rocket1, 200, rocket_position, 64, 64)
image(rocket2, 100, rocket_position, 64, 64)
image(rocket3, 300, rocket_position, 64, 64)
```

Can also set the horizontal position like this