

Step 16

Multiple level games with multiple targets, scores, health and lives are a great deal more complicated than a basic single level game with only one target.

Controller Object

Showing scores, lives and health:

The controller object in this example will control lives, health and scores, it does not have a sprite that represents it in the game as it actually controls several things.

Adding a Controller object to show scores, health , life etc.
[Go to this document for these instructions](#)

Play and refine your game once you have added your Controller object .

Add more sprites and objects to increase the difficulty

Add more rooms

Step 15

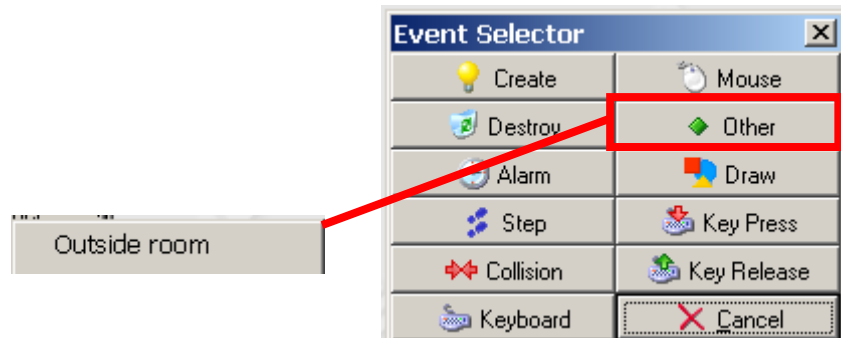
Outside room Events

When the missiles (bullets) disappear of the game screen so we can't see them they still exist and are still being controlled by the computers processor. If we don't destroy the objects that disappear off the game screen there will eventually be so many objects that the computer will slow down. So we need to keep the equation on the screen and destroy missiles that go off the screen.

Still In Objects for your missile (bullet) object

Add another Event, select "Other"

Select "Outside room"



In the **Actions** for the **Outside room Event** for the missile, now select:

In the Main1 tab, Drag the **Destroy Instance of object** into the Actions column.

In the dialogue box- Applies to : **Self**



Step 13

Now you are going to destroy the target with your missile (bullet)

In Objects : select your missile object, mine is called obj_fire



Add Event: add a Collision Event. The collision will be with the number object. Mine was called obj_42

In the Main1 tab, Drag the **Destroy Instance of object** into the Actions column.

In the dialogue box- Applies to : **Other**



Step 14

Adding a sound when the number is destroyed

Still In Objects for your missile object, for the **Collision Event with the target (number)** . Add another action for this event:

From the Main1 tab - Drag the **Play Sound** into the Actions column

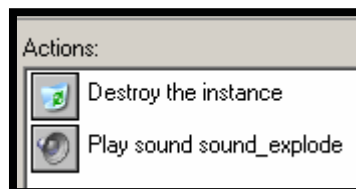
In the Sound dialogue box : select the other sound you created

Select Loop: False

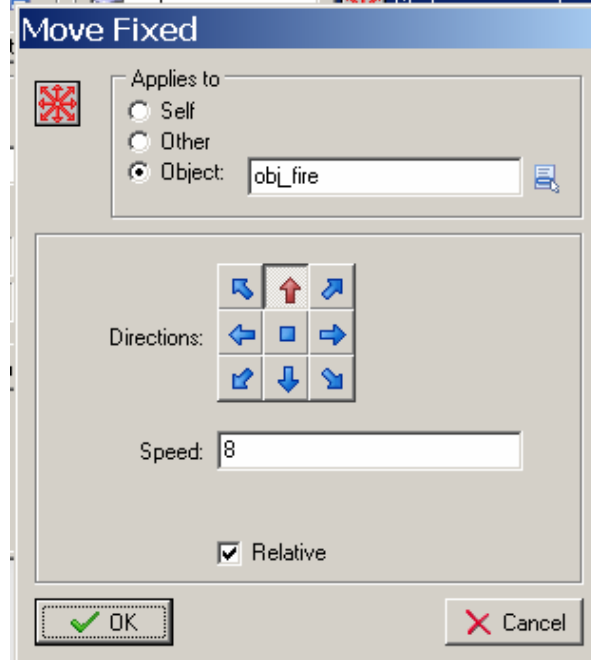


Summary

In Objects, for your missile object
Collision with number Event
These are the actions



In the Start moving in a direction dialogue box , the following: This causes the missile (obk_fire) to mve upwards at speed 8



select

Step 11

Add a sound when you fire the missile (bullet)



Still In Objects obj_q1 , add a Key Press Event <space> we will add another action to this event

From the Main1 tab - Drag the **Play Sound** into the Actions column

In the Sound dialogue box : select the sound you created

Select Loop: False



Step 12

Test your game as shown in step 8

Step 8

Your keyboard arrow keys should now be able to control the movement of the obj_q1 around the screen.

Test that this works by running the game. Press Run, test and return to the game .

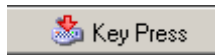


Step 9

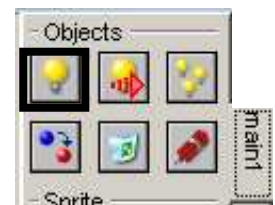
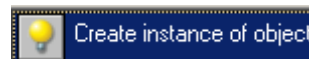
Now we will cause the missile (bullet) to be fired out from obj_q1.

In Objects: for object - obj_q1

Add a Key Press Event <space>



From the Main1 tab : Drag the **Create instance of object** into the Actions column



In the Create Instance dialogue box check:

Applies to “ **Other** “

Object “ **obj_fire**” (or whatever your missile object is called)

Check “**Relative**”

X : 0

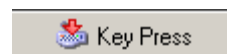
Y : -2

We have now created the missile (bullet), it will appear just above the equation wherever the equation is on the screen, but so far the bullet isn't moving.

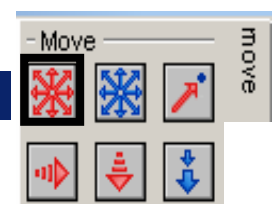
Step 10

Make the bullet move upwards fairly fast

Still In Objects for object - obj_q1 , add a Key Press Event <space> we will add another action to this event



From the Move tab : Drag the **Start moving in a direction** into the Actions column



Add a **Keyboard Event <Up>**

In the Actions – Move tab: click and drag “**Jump to a given position**”

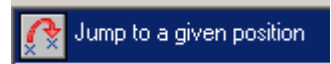
In the settings box :

Applies to “self”

X= 0

Y= -1

Check relative



Add a **Keyboard Event <Down>**

In the Actions – Move tab: click and drag “**Jump to a given position**”

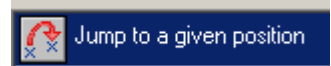
In the settings box :

Applies to “self”

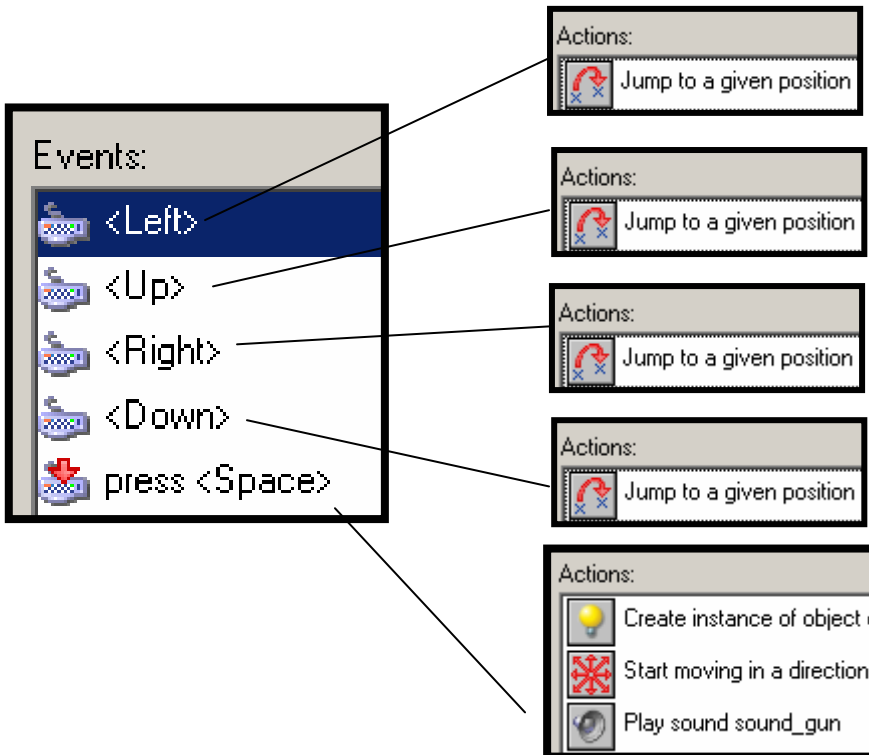
X= 0

Y= 1

Check relative



Summary OBJECTS : *For the obj_q1*



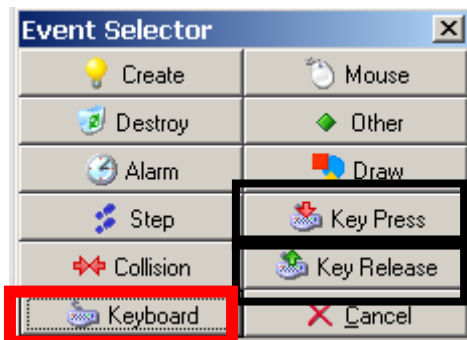


Step 6

Create / load sounds. You will need at least 2 sounds, one for when you shoot the missile and one for when you hit the target. Both should be checked as “Normal sound”

So far we have simply created 2 items in our room, nothing is happening though.

Programming some actions – Moving the object using the keyboard



Step 7

We will now program our keyboard to move the equation object around the screen, left , right , up and down : Note that in Events there are 3 types of Keyboard Events, take care to select the one in these instructions.

In Objects – click on obj_q1

Add a **Keyboard Event <left>**

In the Actions – Move tab: click and drag “**Jump to a given position**”

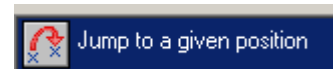
In the settings box :

Applies to “self”

X= -1

Y= 0

Check relative



Add a **Keyboard Event <right>**

In the Actions – Move tab: click and drag “**Jump to a given position**”

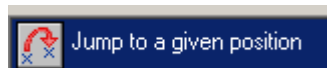
In the settings box :

Applies to “self”

X= 1

Y= 0

Check relative



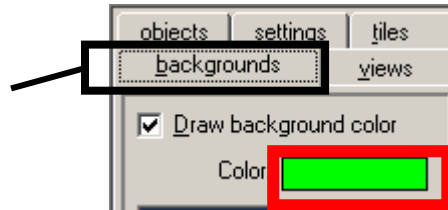
Step 3



Create a room

Rooms can be considered as levels

Change the background colour of the room



Step 4

Add the objects to your room



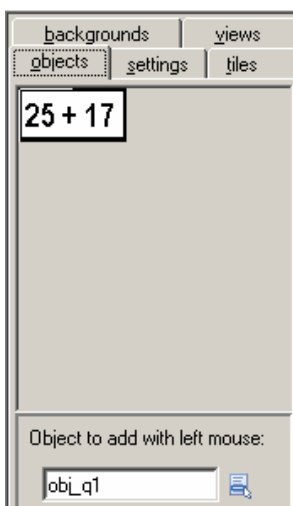
In Rooms – Room0

Click on the objects tab, select your number object and place the number object in your room at approximate co ordinates
 $x = 352$ and $y = 112$

The lower margin of the room screen will show you what co ordinates you are on



Step 5



Still In Rooms – Room0

Still in the objects tab, select your equation object and place the equation object in your room at approximate co ordinates
 $x = 16$ and $y = 432$

The lower margin of the room screen will show you what co ordinates you are on



Mind Games –Shoot the Answers – Simple

Game Idea

In this game the player is the equation (question) , the target is the correct answer (a number). We will shoot missies out from the equation to hit the correct answer target.

To make the game more interesting there will be a number of other numbers that are also targets but are not the correct answer to the equation.

We will make the game progressively better by increasing the difficulty, adding scoring, lives and levels.

Step 1

Create 3 Sprites:



An equation sprite call it spri_q1

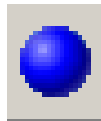
A missile (bullet) call it spri_fire

A target sprite (this is a number that is the answer to your equation), give it the name of your number eg: spri_42

Un-check “transparent” for all 3 sprites

Step 2

Create these Objects



obj_q1 give it the spri_q1 sprite

obj_fire give it the spri_fire sprite