



# MEL Basics

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## **Introduction**

In this tutorial we will create an animated spring by using a helix shape (spline) as the path to loft a circle along. The tutorial will then show you how to link and aim the spring between 2 Dummy objects. You will then write an Expression to modify the height of the spring by calculating the distance between the 2 Dummy objects.

## **Learning Outcome**

The objective of this tutorial is to cover additional tools for modelling and animating objects. The tutorial will also introduce you to writing simple Expressions to control an objects property and identify the problems of using Expressions in a hierarchical model.

The steps involved in the tutorial are:

- XXX
- XXX
- XXX
- XXX
- XXX

## Getting Started

Before you start ensure the Command Line and Help Line are open.

Display > UI Elements > Command Line

Display > UI Elements > Help Line

The Command Line will be replaced with the Script Editor later in the tutorial.

Note : You can click on the MEL icon next to the Command Line to toggle between MEL and Python. Make sure the Command Line is set to MEL.

MEL stands for MAYA Embedded Language. MEL is the core of everything that MAYA does. Every button click, selection and object in MAYA functions because there is a MEL script behind it.

MEL is case-sensitive, this means that lower case and upper case letters are not the same. Therefore, you need to pay careful attention when typing MEL script commands.

It also worth pointing out that space characters are also important and you should follow the examples scripts exactly as defined in this tutorial. Don't miss spaces and don't put extra spaces.

MAYA also doesn't like back slash characters (eg. \). Normally, any slashed in MEL are forward slashes (eg. /).

Download the supporting files from <http://www.fridgemonsters.com/mel/scene01>

## Your First MEL Command

Download and Open the following scene...

<http://www.fridgemonsters.com/mel/scene01>

Place your cursor in the Command Line and type the following..

```
select obj_name
```

This simple MEL script selects an object.

MAYA creates everything by linking NODES together. When you create an object it initially has a shape node and an object node. Later, as your project progresses, you can add a variety of nodes to enhance the object. One such node is Material.

You can use MEL to select a variety of nodes. Select the material node for the object by typing..

```
Select obj_nameMat
```

You can also achieve this by searching for the objects Material node in the attribute editor. However, as you're starting to see, know the MEL commands can save you time.

## Paths

The MAYA scene contains 2 identical objects. Each object is made up of a