

Animation

(cartoonster.com)

Animation

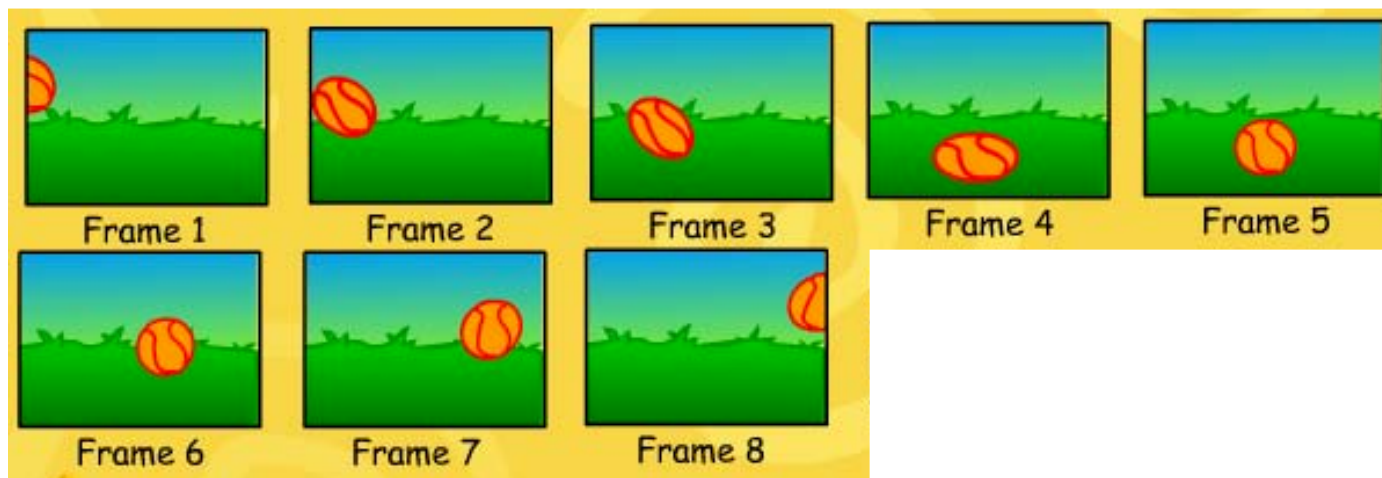
Animation = drawing that moves

Tricking eye into believing something is moving

Sequence of drawings

Each drawing called frame (= snapshot of what is happening at that moment)

Frames are organized in line (timeframe) to show an action bit by bit, movement-by-movement.



Animation

Frames overlap each other and the mind does not see them as separate drawings but as a moving image.

Frame rate = how many frames are played in a second

Higher number => smoother transitions

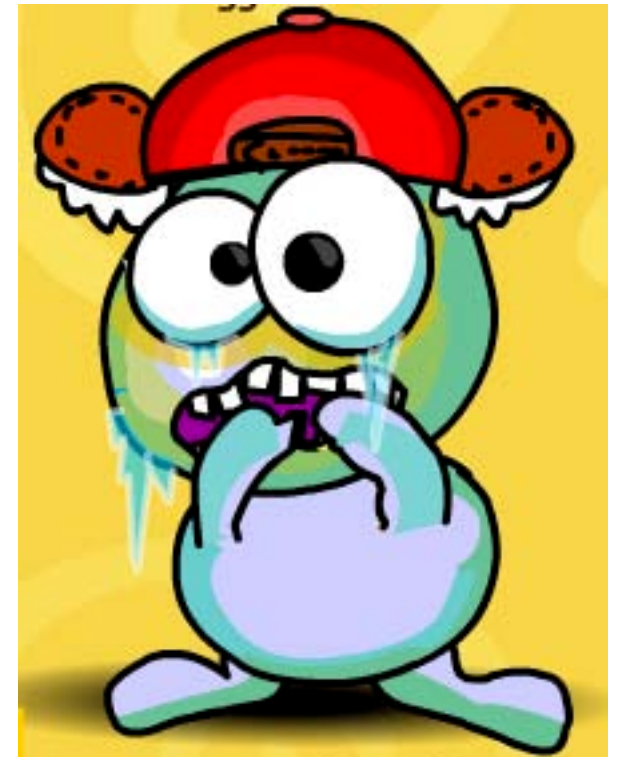
Most cartoons on TV 12 frames per second



Animation

How to make animation interesting?

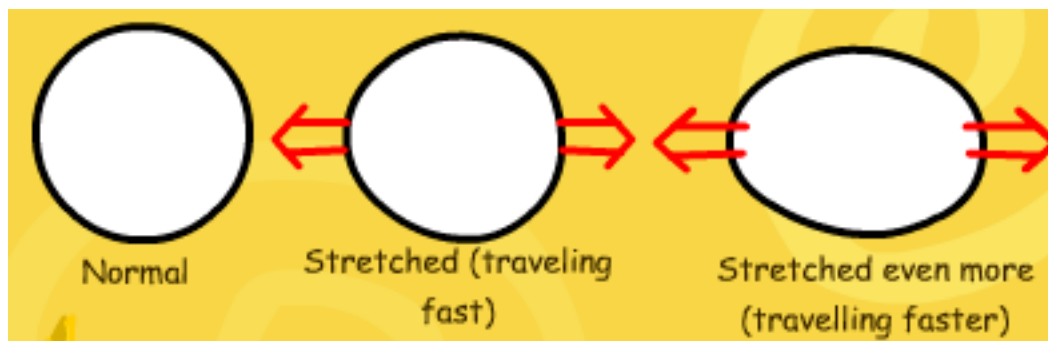
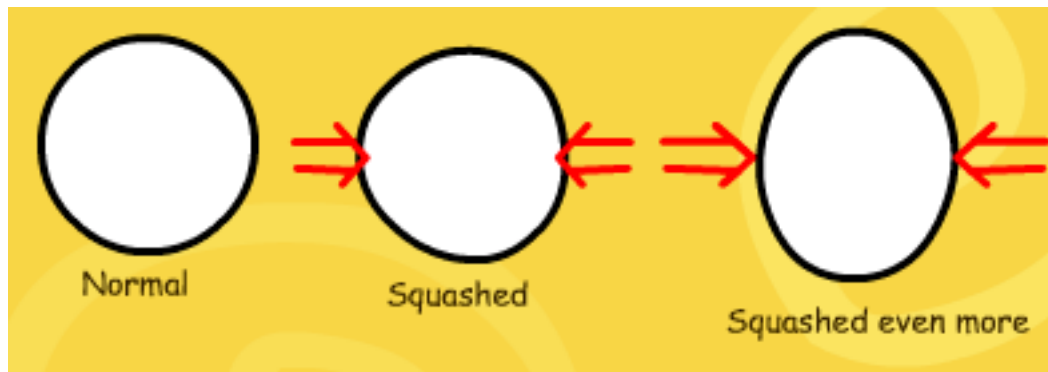
Exaggeration, overstating features



Animation

Stretch and squash

When object hits something, it becomes squashed
When object travels in space, it stretches



Animation

Remember:
Change in shape does not mean change in volume
Elasticity of an object depends on its properties
(rubber ball x bowling ball)

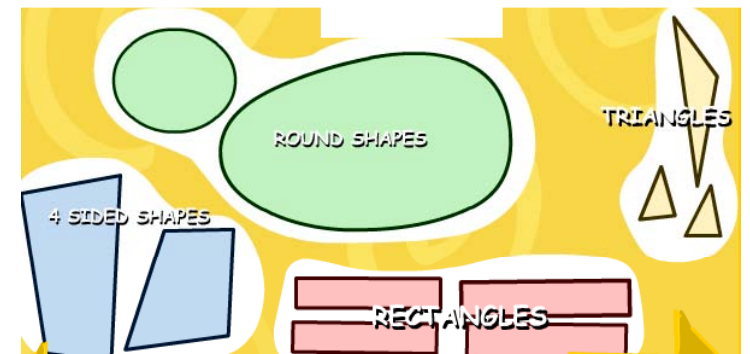
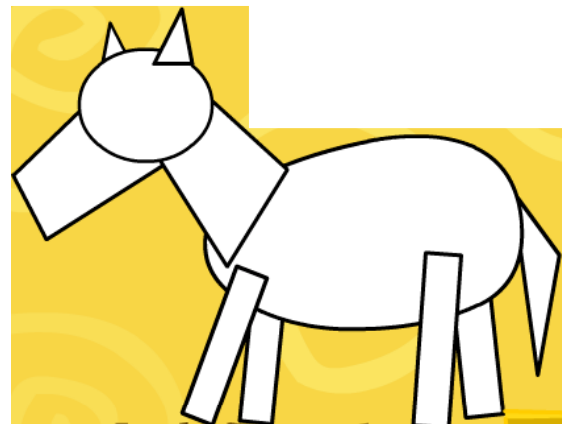
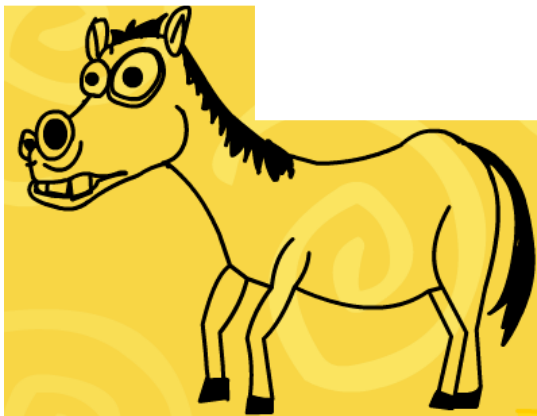


Animation

All complex objects and characters can be broken down to a series of basic shapes

Animating and manipulating basic shapes is very important

Stretch and squash principle can be used in animating basic shapes



Animation

2D animation can be turned into 3D using perspective to add depth to an object.

As the object moves towards the viewer, it will appear bigger. As the object moves away, it will appear smaller. This creates depth.

