







"Animation is imagination."

#### Animation as Digital Resource for Teaching and Learning



• Teaching methods are no longer limited to classroom activities.

• use of innovative teaching-learning methods to focus on the holistic development of the learners.

• With new educational trends, the use of animation in education is becoming more popular. Its ability to facilitate the learning of complex concepts contributes to its popularity among educators and learners





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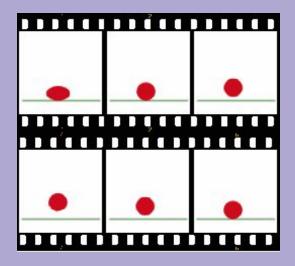
What is Animation?

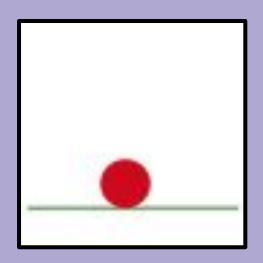




Animation is a technique in which static images/stationary objects that cannot move can be shown moving, speaking or reacting.







The above bouncing ball animation consists of these six frames, repeated indefinitely.





It is a process in which the pictures are arranged in a specific sequence that creates an illusion of motion of the object.

## WHAT ALL DOES ANIMATION INCLUDES?





Cartoons



Graphics

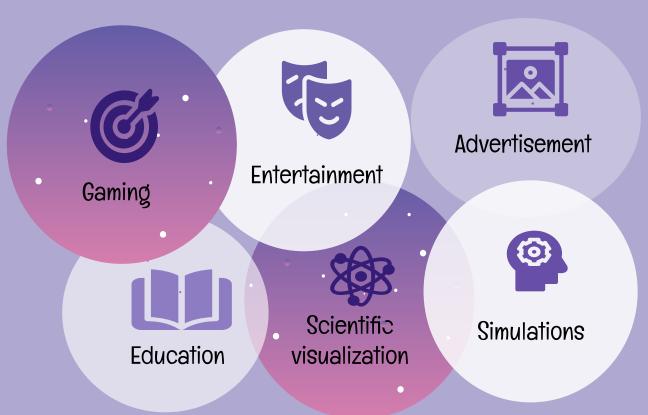


Moving Pictures



. GIF

## Uses of Animation





### **Traditional / 2D Animation**





animation in which 2D dimensions of any object are visible, in which you can only estimate the length and width of the image used in the animation. This type of 2D animation was first used in cartoons.

## **Example of 2D animation**





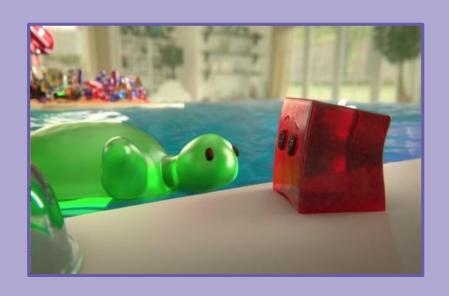
### 3D Animation



3D or computer animation is creating 3-dimensional moving images in a digital environment. Animated objects can be rotated and moved in the same way as real objects, creating a lifelike effect.

### 3D Animation





3D animation is that in which any object can be rotated up to 360 degrees and we can see the 3 dimension length, width and thickness of the object.

## **Example of 3D animation**





#### **VFX Animation**



VFX or Visual Effects are a way of mixing real film shooting with false or animated images. For instance, a movie that shows the hero jumping off the ground and flying into the air, is created using VFX

#### VFX Animation



In this type of animation, a picture of animation of anima and scene is shot in a blue and green background, and then some special effects are used in its background and later that scene is seen as something

## Example of VFX Animation:



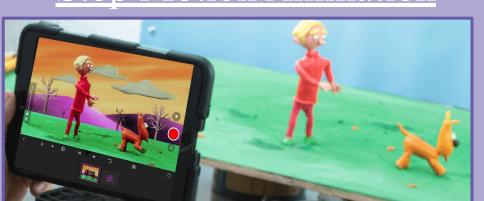


## **Stop Motion Animation**



Stop motion animation is a technique that is achieved by capturing one frame at a time, using physical objects or props that are moved between frames. When the sequence of images is played back at rapid speed, an illusion of movement is produced. Clay figures or puppets with movable joints are often used in stop motion animation

## **Stop Motion Animation**





Stop motion animation is a technique by which objects can be moved automatically. In this, some pictures are drawn, their different photos are clicked in different positions, and when these images are played in a sequence, a movement appears in it called stop motion animation.

## Example of Stop Motion Animation









- Object-Motion moving or animating objects.
- Claymotion moving clay.
- Cutout-Motion moving paper/2D material.
- Puppet Animation moving puppets.

#### Tools for Animation

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- 1. Blender
- 2. Synfig Studio
- 3. Pencil 2D
- 4. OpenToonz
- 5. Maefloresta Tupitube
- 6. GIMP
- 7. Krita
- 8. Stop Motion Studio



## Animation in Education





The quality of education can be enhanced with the inclusion of animation in classroom teaching.



Students learn better with visuals and graphics than the traditional teaching methods.



Animations can be used for engaging visual impact



Using animation in education is fun.



# Ways to incorporate Animation in Education





Animation of

Animation of Subject-based topics



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Enhancing the quality of class presentation



Making visualization more interesting and easier



Removing the age factor in learning

## Advantages





## Disadvantages

know-how



Requires a Cost-consuming **Technical** Require lot of effort knowledge bandwidth and time



## Career Pathway.in Animation

#### **Courses/diploma at Undergraduate level:**

- Diploma in Digital Video and Broadcast Animation
- B.Sc. in Animation and Multimedia
- UG Program in Animation and VFX
- UG Program in Graphics and Communication Design
- Professional Program in 3D Animation
- Professional Development Program in 3D Animation & Visual Effects

#### Courses/diploma at Postgraduate level:

- PG Program in Graphics and Communication Design
- PG diploma in 3D Animation and Multimedia

#### Jobs directly related to animation include:

- Animator
- Concept artist
- Games developer
- Graphic designer
- Illustrator
- VFX artist
- Web designer

## Reflective Activity-Padlet

Why should we use Animation in Teaching Learning Process?

## Link- https://padlet.com/cybersafety/animation





