

ART 4101

MOVING IMAGE ART

OSU ART & TECHNOLOGY

SPRING 2021

JANUARY 11- APRIL 23

CHALLENGES

12 PRINCIPLES OF ANIMATION

✂ ✱ ✂ CHALLENGE 1 ✂ ✱ ✂

SQUASH AND STRETCH



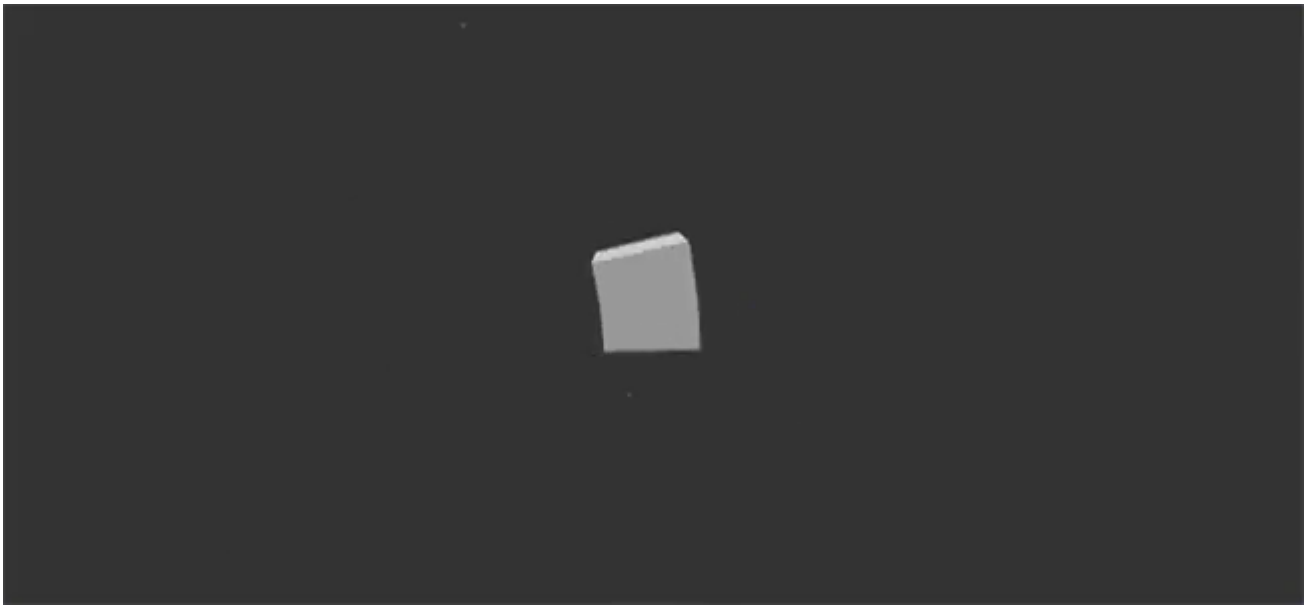
Squash & Stretch is used to create the illusion of weight and preserve the volume in an animated character or object. If we add more squash and stretch to an object it becomes clear to the viewer that what we're animating is pliable and malleable. If we add little or no squash, the object comes across as rigid and inflexible. Not only can you use it to define a subject's weight, flexibility, and volume, but you can also use it to exaggerate gestures.

Create an animation no more than 5 seconds that demonstrates an object or character with the principle of squash & stretch

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✂ ✱ ✂ CHALLENGE 2 ✂ ✱ ✂

ANTICIPATION

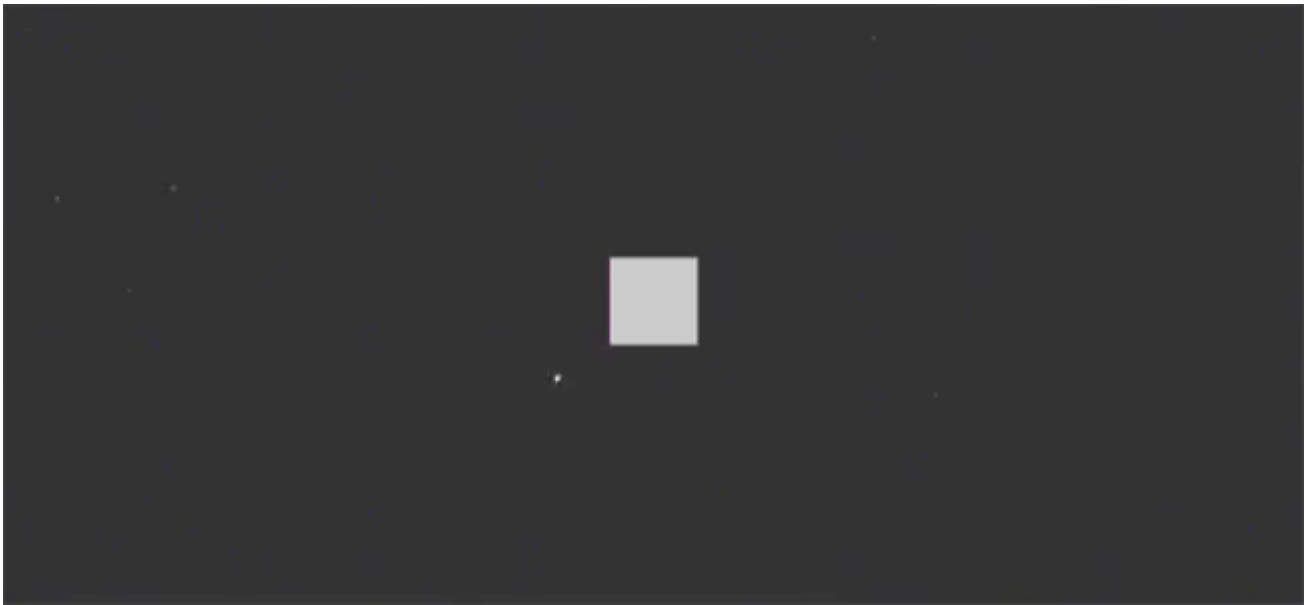


Anticipation is the build up to an action. It is used to add clarity and suspense to the subjects that we animate. Furthermore, you make actions more realistic by creating anticipation. There are three steps when incorporating principles of anticipation: Prepare the viewer for the action. Carry out the animation. Remind the viewer of the action that just occurred. As an example, consider how it may look if you were to kick a ball on the ground in front of you without extending your leg backwards before doing so. It would look unnatural or be flat and lifeless.

Create an animation no more than 5 seconds that demonstrates an object or character with the principle of anticipation

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✂ ✱ ✂ CHALLENGE 3 ✂ ✱ ✂
STAGING

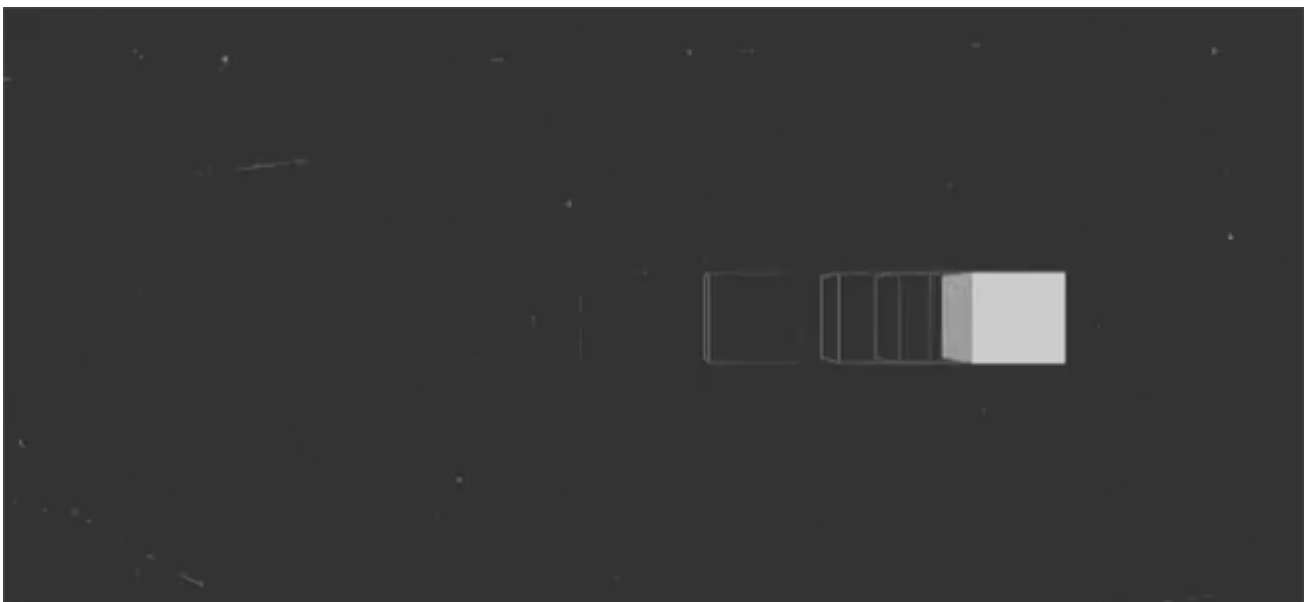


Staging is a way of composing your animation so that the idea is clear and concise (not distracting). Think of how an audience would understand a stage play and where the eyes are compelled towards based on the elements and performers on the stage and how this aspect forms a narrative. This is a broad principle that determines where your characters are in the frame, where objects are positioned, what the camera is looking at, and what positions things move towards. A form of visual rhythm and composition.

Create an animation no more than 5 seconds that demonstrates an object or character with the principle of staging

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✂ * ✂ CHALLENGE 4 ✂ * ✂ EASE IN AND EASE OUT



Many actions in life do not start and stop instantaneously. Either because of gravitational pull or due to a subject's weight, its start speed may be slower than its constant speed and it will gradually decelerate until coming to a stop. By using ease in and ease out, one can create animations that look less abrupt and more natural while emphasizing the middle step of the animation. You can demonstrate sudden impact with by withholding the use of ease in and ease out consequently. Like a bowling ball hitting pins.

Create an animation no more than 5 seconds that demonstrates an object or character with the principle of Ease in and Ease out

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⌘ * ⌘ CHALLENGE 5 ⌘ * ⌘ TIMING & SPACING



Timing & Spacing is crucial in order to create believable and appealing movement. Timing & Spacing characterize the weight and define the movement of a subject. For instance, we can guess that an animated object has little weight if its movements are swift or it takes little time for the object to accelerate and decelerate. On the otherhand, a slower moving animated subject can tell us that it is maybe heavier and more massive.

The timing of an animation is considered the beat or the time it takes to get from one gesture to the next. You can break down a subject's action into beats. First, the subjects initial pose. Second, the subject's anticipatory pose, third, the subject's action, and fourth, the subject's rest pose. These beats represent the extreme gestures of the subject's actions. The spacing is the motion in-between each of the beats in an animation. Adjusting the timing and spacing of your animation can alter the style and create variations of dramatic effect.

Create an animation no more than 5 seconds that demonstrates an object or character with the principle of Timing & Spacing

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✂ ✂ ✂ CHALLENGE 6 ✂ ✂ ✂
ARC

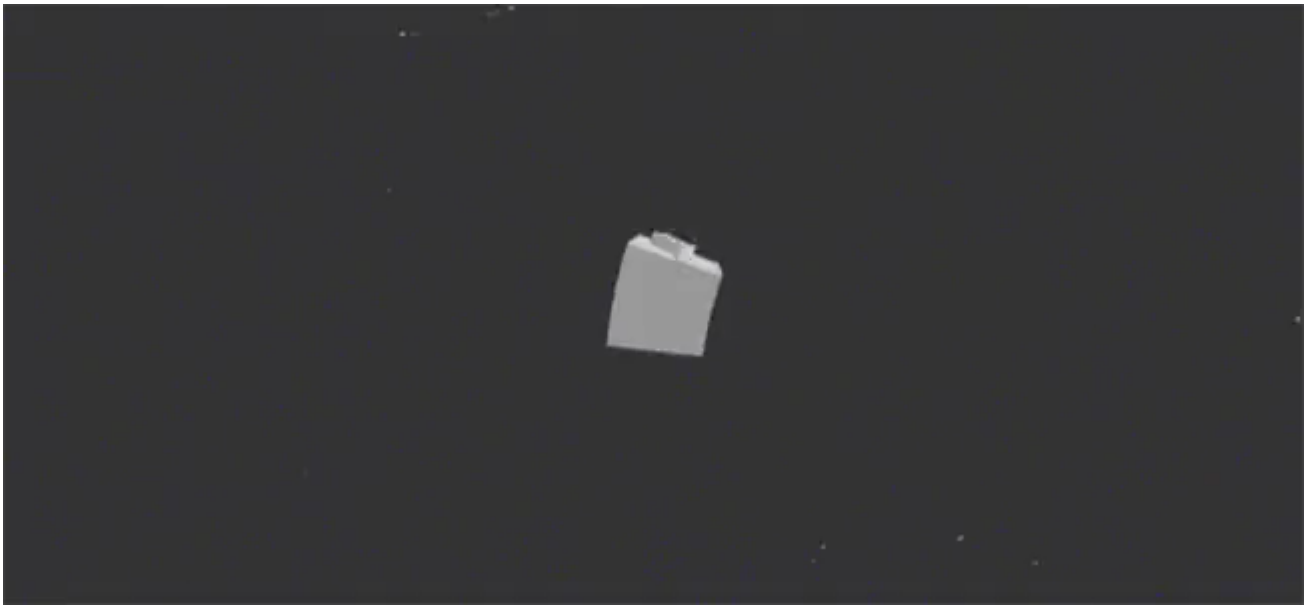


Arcs depict the curved path of action an object should travel in for the motion to look convincing. In life, movement rarely occurs in a straight line. Even humans doing a forward stride have slight vertical up and down arcs in their motion. By adding arcs, movements can look less mechanical and more organic. Arcs give us a sense of the law of physics. When you throw a ball across the room, the ball follows a natural arc due to gravity.

Create an animation no more than 5 seconds that demonstrates an object or character with the principle of arcs

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✂ ✂ ✂ CHALLENGE 7 ✂ ✂ ✂
SECONDARY ACTION

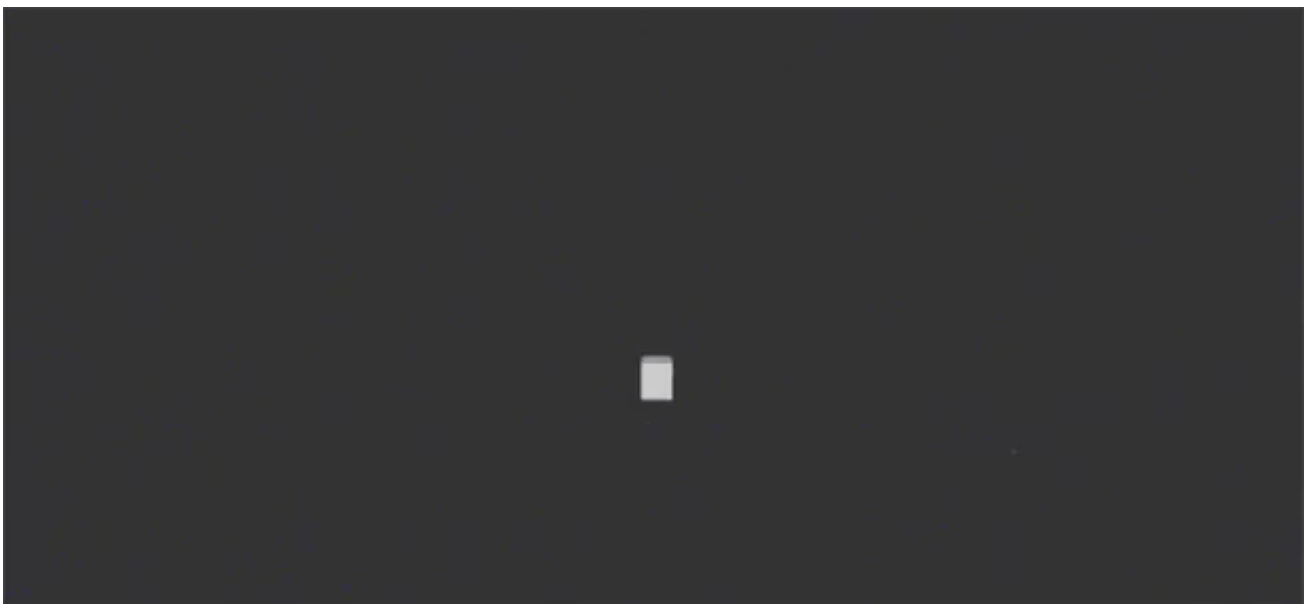


Secondary actions aim to support or emphasize the main action happening in a scene. By adding secondary actions, they can create dimension to subjects. A good example is creating subtle movement to the hair of your character as they walk or jump up and down. The main action is the walking and the secondary is the bounce or wave of the hair as they walk.

Create an animation no more than 5 seconds that demonstrates an object or character with the principle of Secondary Action

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✂ ✱ ✂ CHALLENGE 8 ✂ ✱ ✂ EXAGGERATION



By exaggerating characteristics or actions of objects or characters, you can give them style and make them more unpredictable and dynamic. These actions can add to the character's overall appeal while also alluding to your personal style.

Create an animation no more than 5 seconds that demonstrates an object or character with the principle of Exaggeration

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✂ * ✂ CHALLENGE 9 ✂ * ✂

FOLLOW THROUGH AND OVERLAPPING ACTION



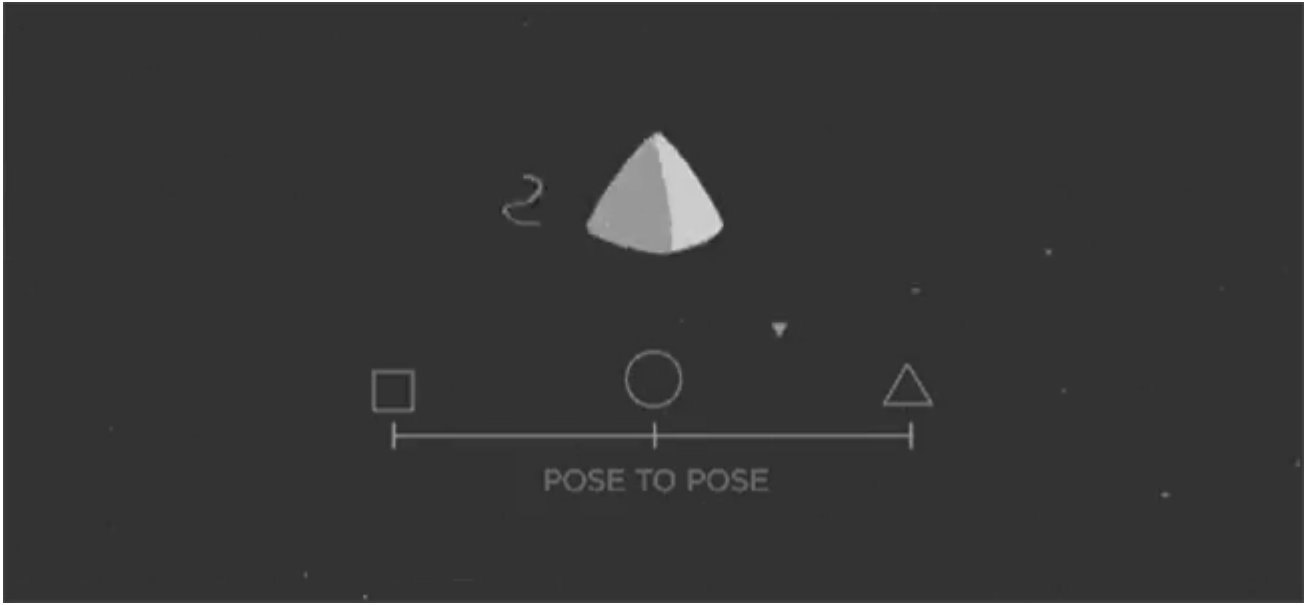
Follow-through and overlapping action are related topics that can accomplish the same goal of realistic motion. Follow-through is an idea that appendages or accessories of subjects continue to move even when the motion is finished. If a character with a purse is running and suddenly come to a halt, the purse may fly forward beyond the position of the idle body and fall back where the character stopped. Think of being in a car that suddenly brakes and the way the body may jolt forward before being constrained by the safety belt as an example as well.

Overlapping action is when different parts of the body or attachments of a subject move at different rates. When walking, your arms may have a different speed than your head.

Create an animation no more than 5 seconds that demonstrates an object or character with the principle of Follow through and overlapping action

Upload to Vimeo and share your link to Challenges ⇒ challenge-9

✂✂ CHALLENGE 10 ✂✂
STRAIGHT AHEAD ACTION AND POSE-TO-POSE

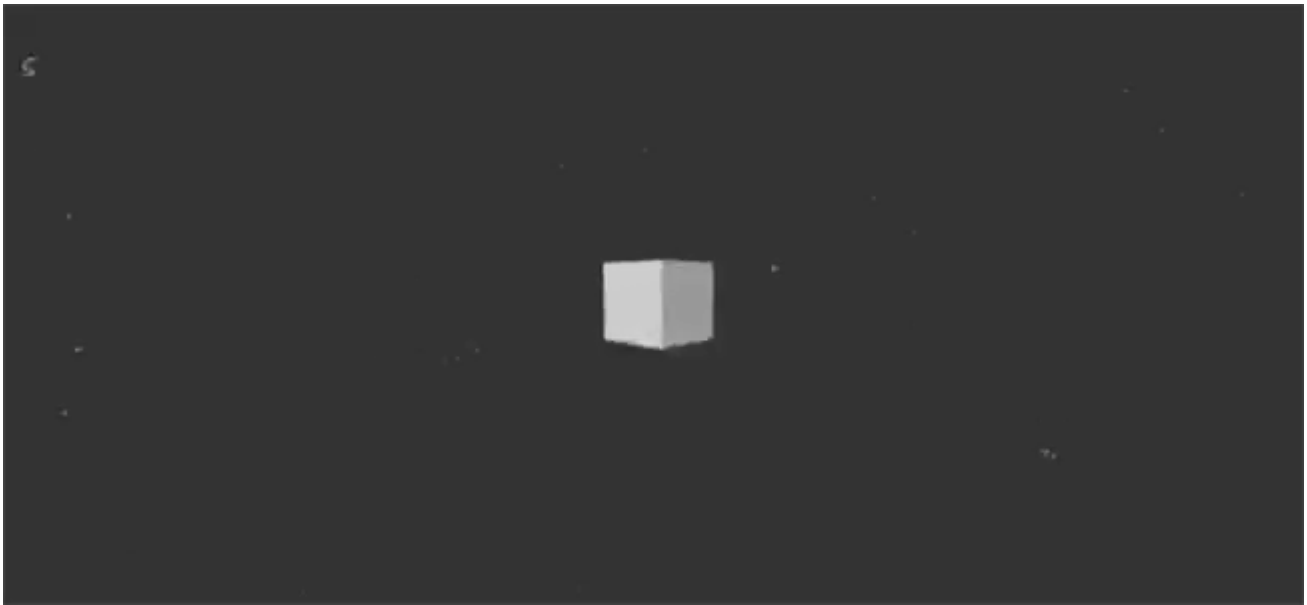


Straight Ahead Action and Pose-to-Pose are two different methods to animate movement. With straight ahead action, you draw each frame one by one until the animation is complete. With pose-to-pose, you draw a few frames throughout the scene to control the timing and motion and then you go back to fill in the missing frames. Benefits of straight ahead action is that the motion is often smoother. The problem with it is that it is hard to plan the complete motion. With pose-to-pose, you have control of consistency but the motion may be less fluid.

Create an animation no more than 10 seconds that demonstrates an object or character with the principle of Straight Ahead Action and Pose-to-Pose

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✂✂ CHALLENGE 11 ✂✂
SOLID DRAWING



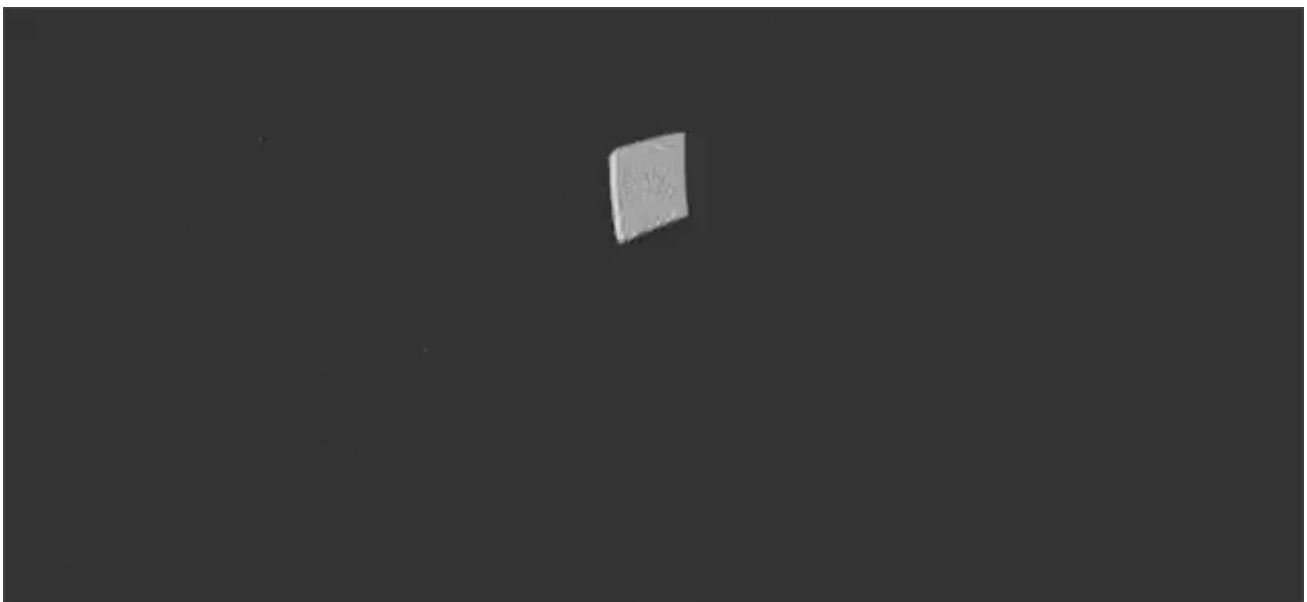
Solid drawing ensures that your objects have the correct shape, mass, and weight. Most subjects can be broken down into 3 dimensions of cubes, spheres, or cylinders. This is about drawing characteristics of your subject in proportion to itself and other surrounding subjects in the environment.

Create an animation no more than 3 seconds that demonstrates an object or character with the principle of Solid Drawing

Upload to Vimeo and share your link to Challenges ⇒ challenge-11

✂ ✱ ✂ CHALLENGE 12 ✂ ✱ ✂

APPEAL



Appeal is defined as anything that the viewer is attracted to whether they "like" or "dislike" what they see is less the point. This ranges from the character's design to their mannerisms. An important aspect of appeal is to keep things simple and clear to read while also giving your subject a personality. Appeal has no easy formula and often can be attributed to aspects outside of animation like character design, world building, and narrative. This is very subjective and can also incorporate a combination of animation principles.

Create an animation no more than 5 seconds that demonstrates an object or character with the principle of Appeal

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