Video Sensing Cards
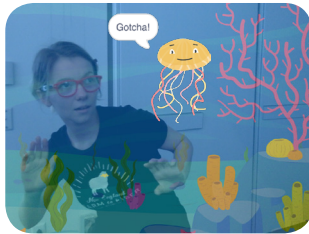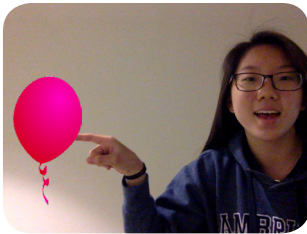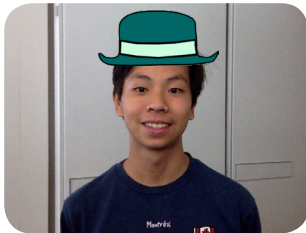

Interact with a project using video sensing.

Download a copy of these cards at:
bit.ly/ScratchSensingCards18

SCRATCH

Video Sensing Cards

Try these cards in any order:

1. **Pet the Cat**
2. **Change Color**
3. **Animate**
4. **Pop a Balloon**
5. **Keep Away Game**
6. **Move a Sprite**
7. **Back and Forth**
8. **Clean The Screen**

SCRATCH

Pet the Cat

Make the cat meow when you touch it.

scratch

Pet the Cat
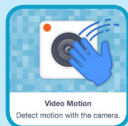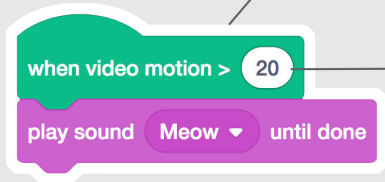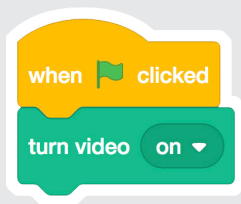
GET READY

Click the Add an Extension button (on the bottom of the screen).

Choose Video Sensing to add the video blocks.

ADD THIS CODE

Cat

when 🏳 clicked

turn video **on** ▾

Senses motion on a sprite.

when video motion > **20**

play sound **Meow** ▾ until done

Type a larger number to make it less sensitive to movement.

TRY IT
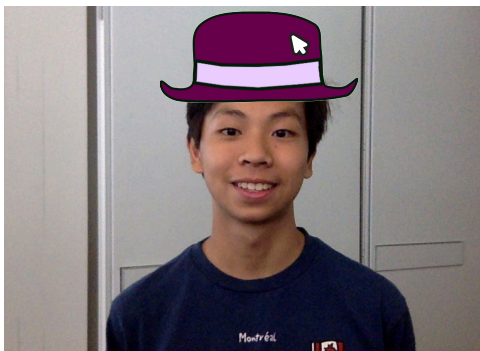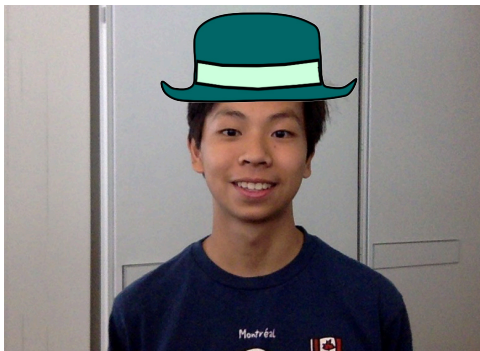
Click the green flag to start.

Move your hand to pet the cat.

Change Color
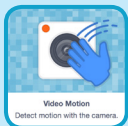
Click on a sprite to change the
color of your fashion.

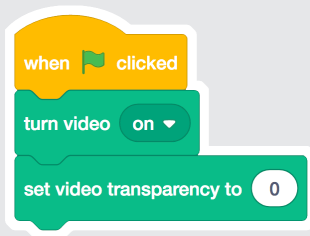scratch

Change Color

beta.scratch.mit.edu

GET READY

Click the **Add an Extension** button, then choose **Video Sensing**.

Choose a sprite, like Hat.

Hat

ADD THIS CODE

Hat

```
when 🏳 clicked
turn video on ▾
set video transparency to 0
```

Type **0** to make the video less transparent.

```
when this sprite clicked
change color ▾ effect by 25
```
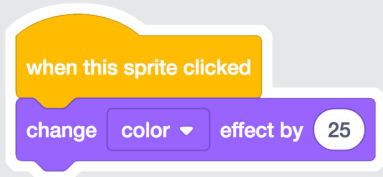
TRY IT

Click the green flag to start.

Click the hat to change its color.

Animate

Move around to bring a sprite to life.

SCRATCH

Animate

GET READY

Click the **Add an Extension** button, then choose **Video Sensing**.

Choose a sprite, like Dragon.

ADD THIS CODE

```
when video motion > 20
switch costume to dragon-c ▼
wait .5 seconds
switch costume to dragon-a ▼
```

Choose one costume.

Choose another costume.

TRY IT

Click the green flag to start.

Move around to animate the dragon.

Pop a Balloon

Use your finger to pop a balloon.
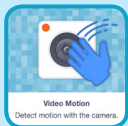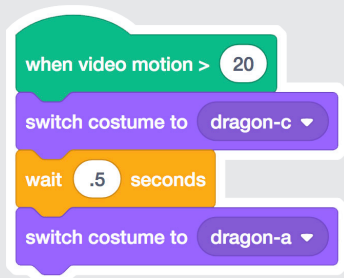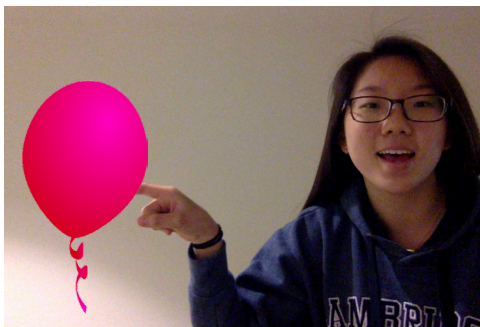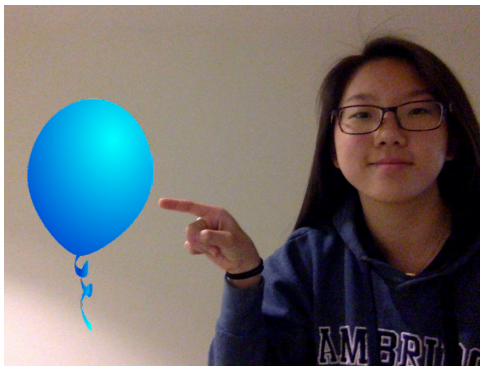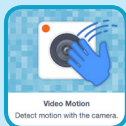
SCRATCH

Pop a Balloon

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GET READY
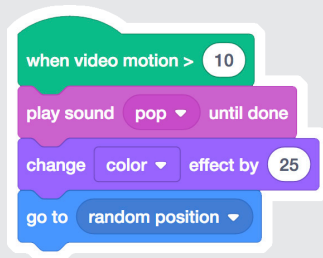
Click the **Add an Extension** button, then choose **Video Sensing**.

Choose a sprite, like Balloon.

ADD THIS CODE

```
when ⚑ clicked
turn video  on ▼
```

```
when video motion > 10
play sound  pop ▼  until done
change  color ▼  effect by  25
go to  random position ▼
```
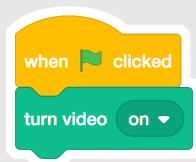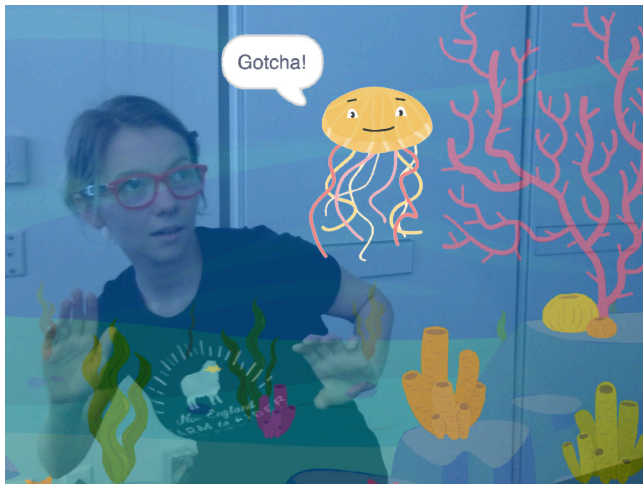
TRY IT

Click the green flag to start.

Use your finger to pop the balloon.
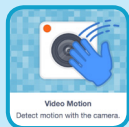
Keep Away Game

Move around to avoid a sprite.

Keep Away Game

GET READY

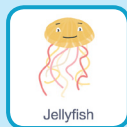Click the **Add an Extension** button, then choose **Video Sensing**.

Choose a backdrop, like Ocean.

Choose a sprite, like Jellyfish.

ADD THIS CODE

```
when [flag] clicked
set video transparency to (50)
forever
    glide (1) secs to (random position ▼)
```

```
when video motion > (10)
say (Gotcha!) for (2) seconds
```
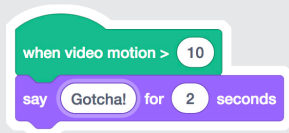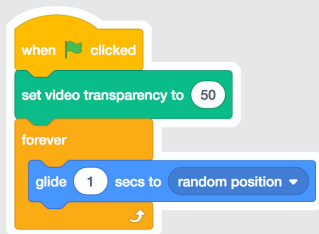
TRY IT

Click the green flag to start.

Move around to avoid the jellyfish.

Move a Sprite

Use your body to move a sprite across the screen.

scRATCH

Move a Sprite

GET READY

Click the **Add an Extension** button, then choose **Video Sensing**.

Choose a sprite, like Beachball.

ADD THIS CODE
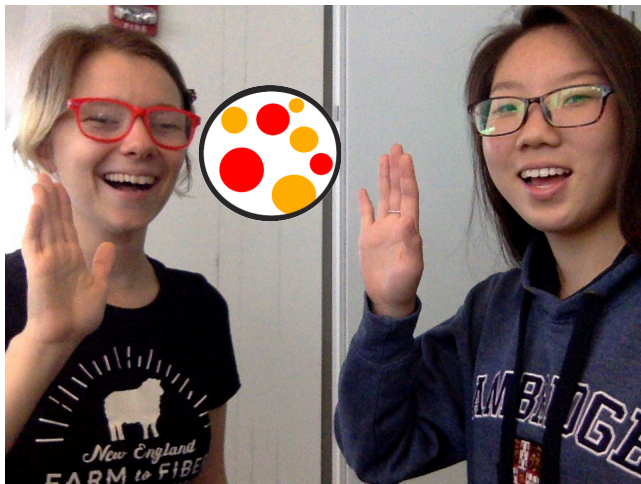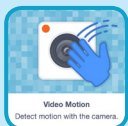
Beachball

```
when 🚩 clicked
turn video [on ▼]
go to x: 0 y: 0
```

```
when video motion > 10
point in direction (video [direction ▼] on [sprite ▼])
repeat 10
  move 10 steps
```
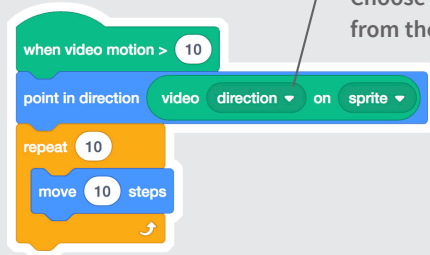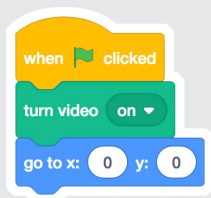
Choose video **direction** from the menu.

TRY IT

Click the green flag to start.

Use your hands to push the beach ball around the screen. Try it with a friend!

Back and Forth

Use your body to bounce a sprite across the screen.

scratch

Back and Forth
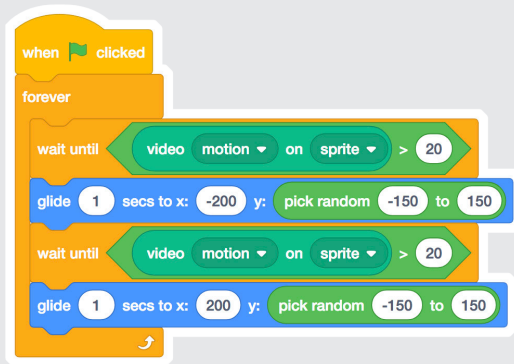
GET READY

Video Motion
Detect motion with the camera.

Earth

Click the **Add an Extension** button, then choose **Video Sensing**.

Choose a sprite, like Earth.

ADD THIS CODE

```
when 🏴 clicked
forever
    wait until   video motion ▼ on sprite ▼ > 20
    glide 1 secs to x: -200 y: pick random -150 to 150
    wait until   video motion ▼ on sprite ▼ > 20
    glide 1 secs to x: 200 y: pick random -150 to 150
```

Add the **video motion** block to the *greater than* **Operator** block.

```
video motion ▼ on sprite ▼
○ > 20
```
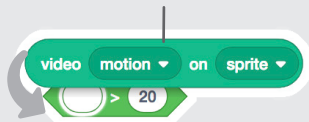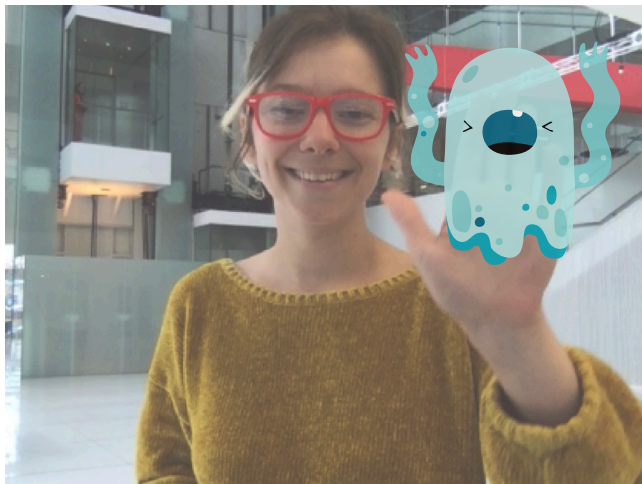
TRY IT

Click the green flag to start.

Use your hands to bounce the ball around the screen. Try it with a friend!

Clean Your Screen

Use your hand to clean your screen
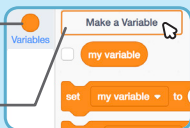by wiping away a sprite.
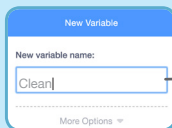
Clean Your Screen

GET READY

Choose **Variables**

Click the **Make a Variable** button.

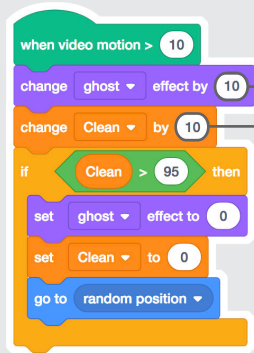Name this variable **Clean**, then click **OK**.

This variable will track how clean your screen is.

New Variable

New variable name:

Clean

More Options

Make a Variable

my variable

set my variable to

ADD THIS CODE

Ghost

Choose a sprite.

```
when 🏳 clicked
set ghost ▾ effect to 0
set Clean ▾ to 0
```

```
when video motion > 10
change ghost ▾ effect by 10
change Clean ▾ by 10
if  Clean > 95  then
    set ghost ▾ effect to 0
    set Clean ▾ to 0
    go to random position ▾
```
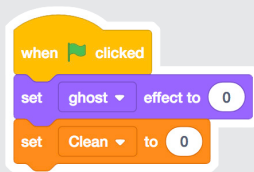
What happens when you double or triple these numbers?

TRY IT

Click the green flag to start.

Use your hands to clean your screen by wiping away the sprite.