

unit 3

Graphics and Animation: Event-Driven Programming Part 3 - Collisions

unit 3

def: a **collision** is when
two turtles somehow
"touch" on the screen.



Overlap

unit 3

Fact: a collision can be thought of as an event, indirectly caused by a human.

unit 3

Q:

How do I teach the Python turtle window to "handle" a collision?

A:

You define a handler!

unit 3

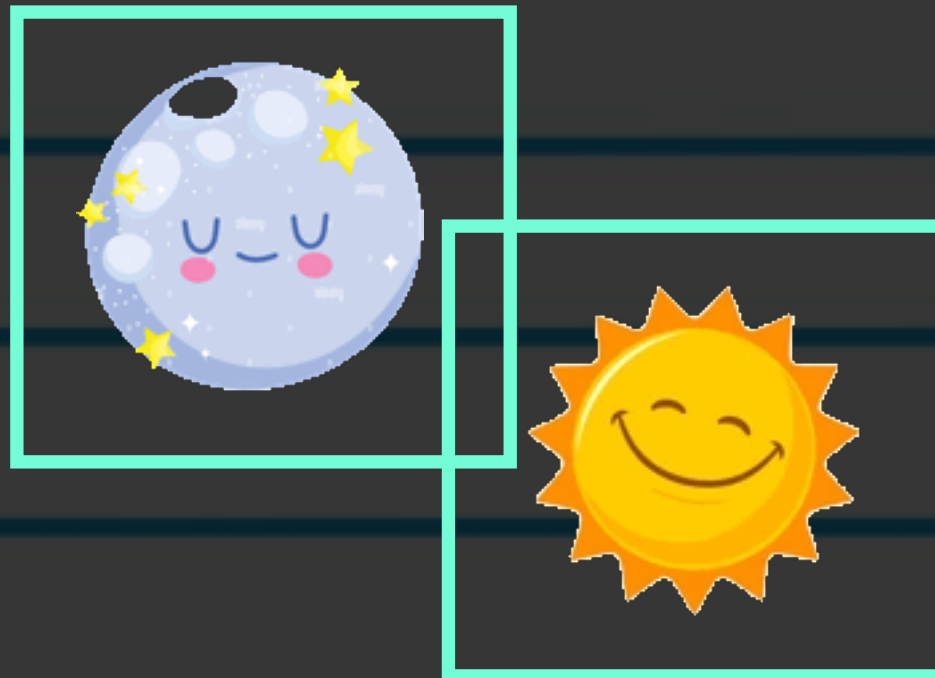
The name of the first turtle
you care about

The name of the
second turtle you care about

```
def areTouching(t1, t2, howClose):  
    return (howClose > t1.distance(t2))
```

An integer--the size of the
"hitbox".

unit 3



These turtles are "touching" because their hitboxes overlap



These turtles are not "touching" because their hitboxes do not overlap

unit 3

of collision detection

Handwriting means
"your choice"

if areTouching (*a turtle, another turtle, boxSize*):

Do something

Red text is
REQUIRED by Python syntax!