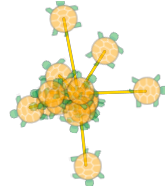


# 16. Sets

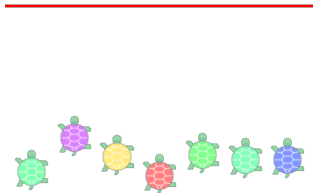
## Scatter

```
turtle.remove()
s = hatch 15, orange
s.pen gold
s.plan ->
  this.rt random 360
  this.fd Math.abs(20 * random normal)
```



## Turtle Race

```
fd 200; pen red; slide 200, 0
finished = 0
racers = hatch 7
racers.plan (j) ->
  @wear random color
  @speed 5 + random normal
  @slide j * 25 + 25, 0
  while not @touches red
    @fd random 5
    await @done defer()
  @label ++finished
```



## Rescue Class

```
turtle.remove()
speed 100
randpos = ->
  [50 * random(normal), 50 * random(normal)]
hatch(20, green).scale(0.75).plan ->
  this.moveto randpos()
  this.addClass 'kid'
hatch(3, red).plan (num) ->
  hero = this
  count = 0
  hero.moveto randpos()
  hero.pen red
  while true
    await hero.done defer()
    kid = $('.'kid').nearest(hero).eq(0)
    if kid.length is 0
      write "hero ##{num} got #{count}"
      return
    else if hero.touches(kid)
      count += 1
      kid.label num
      kid.remove()
    else
      hero.turnto(kid).fd(5)
```

