

```
turtles-own [ ate ] ;boolean,true/false  
patches-own [ toxic-waste ]
```

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```
to SETUP  
clear-all  
ask patches  
[  
set pcolor line  
set toxic-waste 0  
  
]  
  
place-plastic ;randomly place plastic  
update-toxic-waste ;update the color on a patch how much plastic is left  
  
create-turtles 20  
[ set color sky  
set ate false ;the turtle has not eaten plastic yet  
set size 1.5  
setxy random-xxcor random-ycor  
]  
reset-ticks  
end
```

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```
to GO  
ask turtles  
[ ifelse toxic-waste > 0 ; thair is plastic on this patch  
[  
set toxic-waste toxic-waste - 0.1  
set ate true  
]  
[ set toxic-waste 0  
set pcolor line  
]  
]  
update-toxic-waste ;update the color in this patch  
tick  
end
```

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```
to place-plastic ;to show the density of plastic on each patch by color scale  
ask patches  
[  
if random 100 < 30 [  
set toxic-waste random 10  
]  
]  
  
end
```

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```
to update-toxic-waste  
ask patches  
[ if toxic-waste > 0  
[set pcolor scale-color brown toxic-waste 10 0.1 ] ;the color reflect the amount of plastic  
]  
end
```