

1. Imagine how natural selection might have led to the appearance of species 12, 14, and 16. Think about how their common ancestor might have shown different types of variation that were acted upon by natural selection. What might the environment have looked like that caused the selection of the adaptations that show up in species 12, 14, and 16?

Raw materials: VARIATION → preexisting
→ new mutation

Body coloration / powerful back legs
 none ← slightly spotted / striped ← weak / spindly ← strong

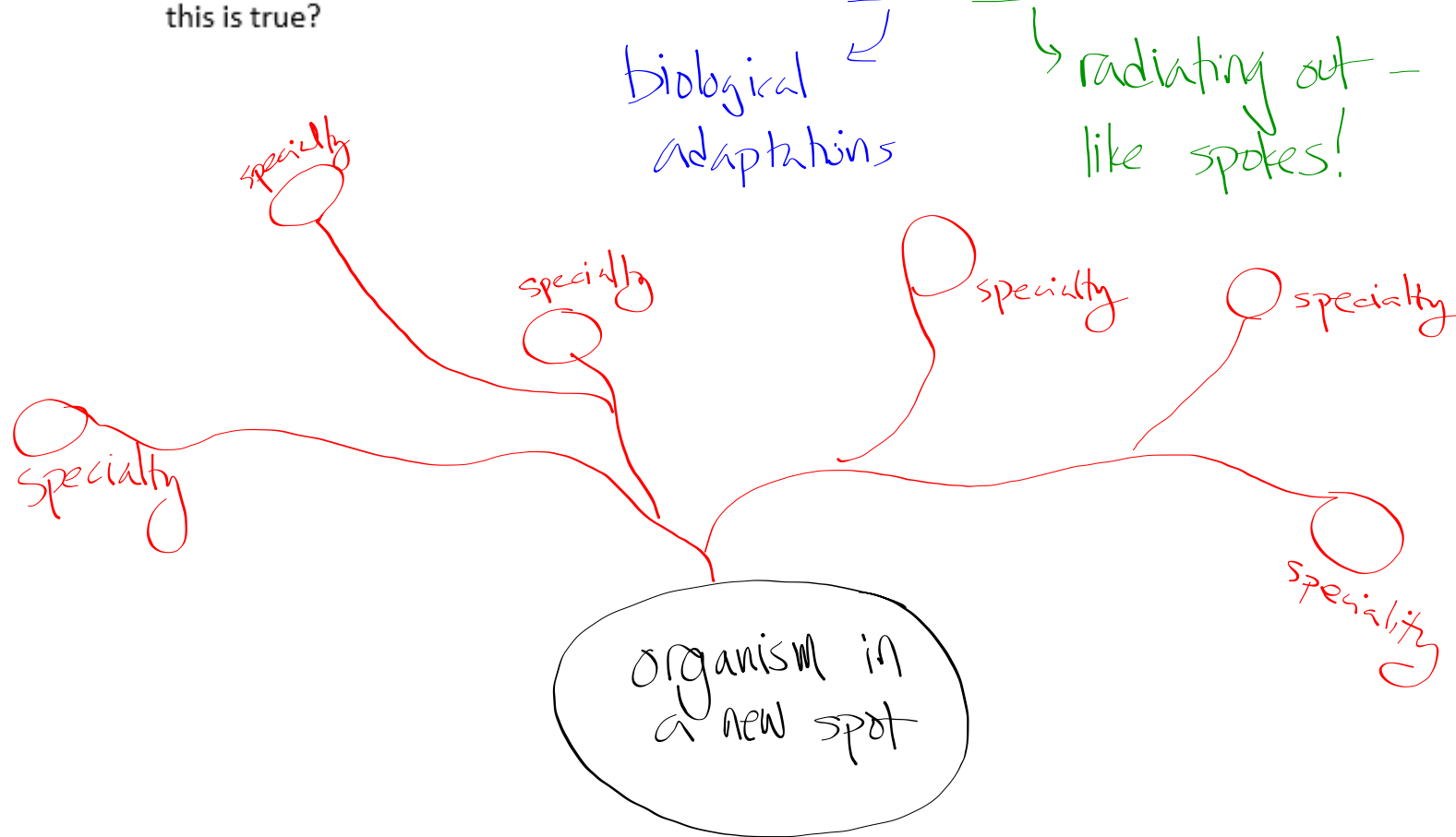
SELECTION PRESSURE: Something in the environment that allows some of the varieties to survive/reproduce more

one environment:
 real "mineraly" rocks → spotted creatures
 were harder for predators to see

another environment:
 lots of grasses → better hiding spots
 for striped creatures

last environment:
 tiny little mice that are fast-happy
 creatures can catch/beat more easily

2. The type of evolution depicted in this lab is called "adaptive radiation". Why do you think this is true?



3. The diagram indicates that species 31 is not extinct. How can this be, since species 31 clearly evolved into several other species? If those species all evolved from species 31, then why is species 31 still around?

(You should be able to use biological terms to tell this story)

