Name:_____ Period: _____

One Strange Rock - "Alien"

1. Where are clues to alien life hidden?

2. When did life on Earth emerge?

3. What is the type of life found dependent upon?

4. Why do glow worms glow?.

5. What can we expect if we find life elsewhere?

6. What is the big question of life?

7. List some of the characteristics of camels that help them live in their environment.

8. Most of life is what type of organism?

9. What are rusticles made of?

10. What are some examples of food sources for bacteria?

11. Why is it handy that bacteria can eat nearly everything?

12. Where did energy come from during Earth's early years?

13. As Earth cooled, what became the new energy source?

14. What do plants do during photosynthesis?

15. What allows bamboo to grow so high?

16. How did lignin change the world?

17. What do plants store?

18. What color is most of the light emitted by the sun?

19. When two things are in an intersecting orbit, what is inevitable?

20. What color of light are most plants using?

21. Other than photosynthesis, what are two ways of obtaining energy?

22. Why have animals evolved their own unique bodies?

23. Why is having a tail beneficial for cheetahs?

24. How often does the Springbuck escape the cheetahs?

25. How much energy do cheetahs spend catching prey?

26. If a predator cannot outrun its prey, what must it do?

27. What do the monkeys trade for food?

28. List examples of how humans have learned to alter the earth to obtain food.

29. How many types of complex life exist on the earth?

30. What was the superpower of the microbe that ingested another?

31. How much more energy can be extracted using oxygen?

32. Why is it rare that life on other planets will be as complex as we are?

Name:_____ Period: _____

NATIONAL GEOGRAPHIC

One Strange Rock - "Alien"

1. Where are clues to alien life hidden?
   Earth

2. When did life on Earth emerge?
   4 billion years

3. What is the type of life found dependent upon?
   The food that is available

4. Why do glow worms glow?.
   Attract prey to eat.

5. What can we expect if we find life elsewhere?
   They will be best adapted for their environment.

6. What is the big question of life?
   What's for dinner?

7. List some of the characteristics of camels that help them live in their environment.
   Flat teeth to chew tough food, hump to store fat so they can go long periods of time without eating or drinking,

8. Most of life is what type of organism?
   Bacteria

9. What are rusticles made of?
   Metal and microbes

10. What are some examples of food sources for bacteria?
    Metals, rock, oil, plastics, human flesh

11. Why is it handy that bacteria can eat nearly everything?
    Can live nearly anywhere

12. Where did energy come from during Earth's early years?
    Heat and lightning

13. As Earth cooled, what became the new energy source?
    The sun

14. What do plants do during photosynthesis?
    Eat sunlight, make CO_2 into starch for stored energy, grow

15. How much energy does photosynthesis generate worldwide each year?
100 terawatts

16. What allows bamboo to grow so high?
Lignin

17. How did lignin change the world?
Provided structural support for plants to grow tall.

18. What do plants store?
Energy

19. What color is most of the light emitted by the sun?
Blue-green

20. What color of light are most plants using?
Red

21. Other than photosynthesis, what are two ways of obtaining energy?
Nibbling all day or one large meal

22. Why have animals evolved their own unique bodies?
So they can maximize their chances of eating without being eaten.

23. Why is having a tail beneficial for cheetahs?
Helps with balance so they don't fall over when turning.

24. How often does the Springbuck escape the cheetahs?
90% of the time.

25. How much energy do cheetahs spend catching prey?
Nearly as much as the energy they will receive eating the Springbuck.

26. If a predator cannot outrun its prey, what must it do?
Outthink it.

27. What do the monkeys trade for food?
Sunglasses

28. List examples of how humans have learned to alter the earth to obtain food.
Chemical fertilizers, hormones and food that increase size of animals, genetic manipulation, robotics

29. How many types of complex life exist on the earth?
8 million

30. What was the superpower of the microbe that ingested another?
Could use oxygen to make energy

31. How much more energy can be extracted using oxygen?
15 times more energy

32. Why is it rare that life on other planets will be as complex as we are?
Took 2 billion years to develop on Earth, leading us to believe it took a rare event.