EXPLORING 7 SCIENCE 7 WORKING SCIENTIFICALLY

Name _____ Class ____ Date ____

You are in charge of a new zoo that is being built, which will try to breed endangered species and will not be open to the public. Some people have objected to the zoo because they disagree with animals being kept in cages. Others are worried that cruel animal experiments will be carried out.

Design a full page newspaper advert to explain how the zoo will use science to help these animals breed healthy young. Explain how this work could prevent these animals from becoming extinct. Include the following points in your advert:

- how the zoo intends to use technologies as well as natural methods to breed the animals
- how sexual reproduction takes place in animals
- why the zoo wants to breed endangered animals.

Name

Class _____

Date

Now that you have completed the activity, circle the number of stars next to each of these sentences to describe how you did.

| I have | | | | | |
|---|---|---|---|---|---|
| stated that animals use their reproductive systems to produce offspring. | * | * | * | * | * |
| described some stages in the lifecycle of an animal. | * | * | * | * | * |
| stated that both male and female animals are needed for sexual reproduction to take place. | * | * | * | * | * |
| stated how breeding endangered animals in zoos can save them. | * | * | * | * | * |
| described, in basic terms, how animals reproduce sexually. | * | * | * | * | * |
| described how some animals care for their offspring. | * | * | * | * | * |
| explained the role of the sperm cell and the egg cell in reproduction. | * | * | * | * | * |
| described changes in diet or conditions required as offspring develop (e.g. milk when very young, then semi-solid foods). | * | * | * | * | × |
| described how sexual intercourse leads to fertilisation. | * | * | * | * | * |
| compared fertilisation and/or development in different animals. | * | * | * | * | ł |
| compared the amount of care different animals give their offspring. | * | * | * | * | ł |
| described the processes of implantation, gestation and/or birth in a named animal. | * | * | * | * | * |
| described in detail how an embryo is formed by the nuclei of the sperm cell and egg cell fusing together and then the cells dividing. | * | * | * | * | * |
| explained why breast milk is best for newborns. | * | * | * | * | * |
| recalled a method used to increase the chances of pregnancy. | * | * | * | * | ł |
| described how ultrasound can be used to check on a fetus. | * | * | * | * | * |
| explained why some animals produce thousands of egg cells. | * | * | * | * | * |
| explained how sperm and egg cells are adapted to their functions. | * | * | * | * | * |
| explained what happens in IVF. | * | * | * | * | * |

What could you do to improve? _____