

ZOOKEEPER *

1 Rules

Z1 If $\exists x$ has hair
then $\exists x$ is a mammal

Z2 If $\exists x$ gives milk
then $\exists x$ is a mammal

Z3 If $\exists x$ has feathers
then $\exists x$ is a bird

Z4 If $\exists x$ flies
 $\exists x$ lays eggs
then $\exists x$ is a bird

Z5 If $\exists x$ is a mammal
 $\exists x$ eats meat
then $\exists x$ is carnivore

Z6 If $\exists x$ is a mammal
 $\exists x$ has pointed teeth
 $\exists x$ has claws
 $\exists x$ has forward-pointing eyes
then $\exists x$ is a carnivore

Z7 If $\exists x$ is a mammal
 $\exists x$ has hoofs
then $\exists x$ is an ungulate

Z8 If $\exists x$ is a mammal
 $\exists x$ chews cud
then $\exists x$ is an ungulate

Z9 If $\exists x$ is a carnivore
 $\exists x$ has tawny color
 $\exists x$ has dark spots
then $\exists x$ is a cheetah

Z10 If $\exists x$ is a carnivore
 $\exists x$ has tawny color
 $\exists x$ has black strips
then $\exists x$ is a tiger

Z11 If $\exists x$ is an ungulate
 $\exists x$ has long legs
 $\exists x$ has long neck
 $\exists x$ has tawny color
 $\exists x$ has dark spots
then $\exists x$ is a giraffe

Z12 If $\exists x$ is an ungulate
 $\exists x$ has white color
 $\exists x$ has black stripes
then $\exists x$ is a zebra

Z13 If $\exists x$ is a bird
 $\exists x$ does not fly
 $\exists x$ has long legs
 $\exists x$ has long neck
 $\exists x$ is black and white
then $\exists x$ is an ostrich

Z14 If $\exists x$ is a bird
 $\exists x$ does not fly
 $\exists x$ swims
 $\exists x$ is black and white
then $\exists x$ is a penguin

Z15 If $\exists x$ is a bird
 $\exists x$ is a good flyer
then $\exists x$ is an albatross

2 Initial working memory A

Stretch has hair.

Stretch chews cud.

Stretch has long legs.

Stretch has a long neck.

Stretch has tawny color.

Stretch has dark spots.

3 Initial working memory B

Splashy has feathers.

Splashy lays eggs.

Splashy does not fly.

Splashy is black and white.

Splashy swims.

*Taken from *Artificial Intelligence (Third Edition)* by Patrick Henry Winston.