



SNS COLLEGE OF TECHNOLOGY

Vazhiampalayam, Coimbatore-35

(An Autonomous institution)

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DEPARTMENT OF PHYSICS

COURSE NAME : 19HST102- ENVIRONMENTAL SCIENCE

I YEAR / II SEMESTER

UNIT : 1. ECO SYSTEM

TOPIC : 5. STRUCTURE & FUNCTION OF FOREST ECO SYSTEM



BRAINSTORMING WITH RECAP



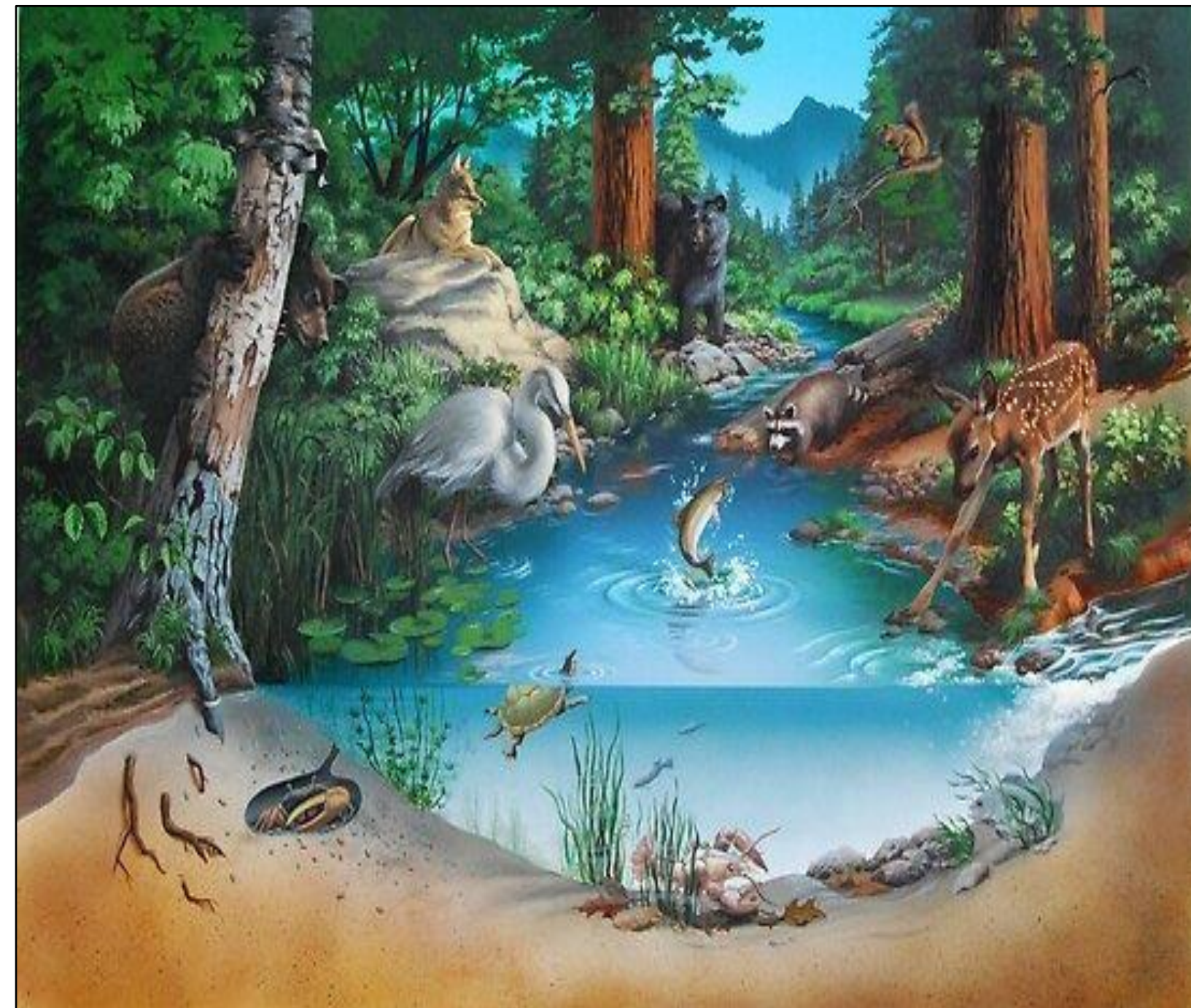


INTRO TO FOREST ECOSYSTEM



- Tall & dense trees grow
- Occupies 40% world's land
- 19% in India

- **Types**
- Tropical rain forest
- Tropical deciduous forest
- Tropical scrub forest
- Temperate rain forest
- Temperate deciduous forest





1. TROPICAL RAIN FOREST & 2. TROPICAL DECIDUOUS FOREST





3. TROPICAL SHRUB FOREST & 4. TEMPERATE RAIN FOREST



5. TEMPERATE DECIDUOUS FOREST

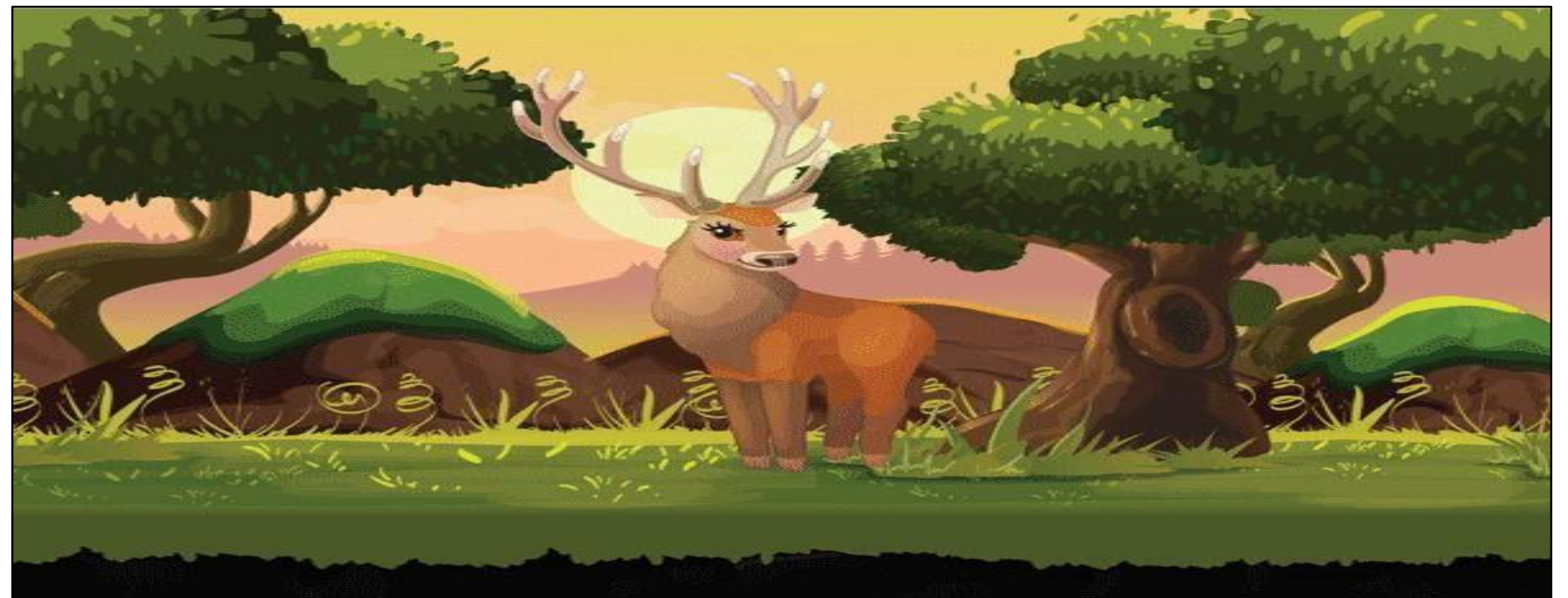




CHARACTERISTICS OF FOREST ECOSYSTEM

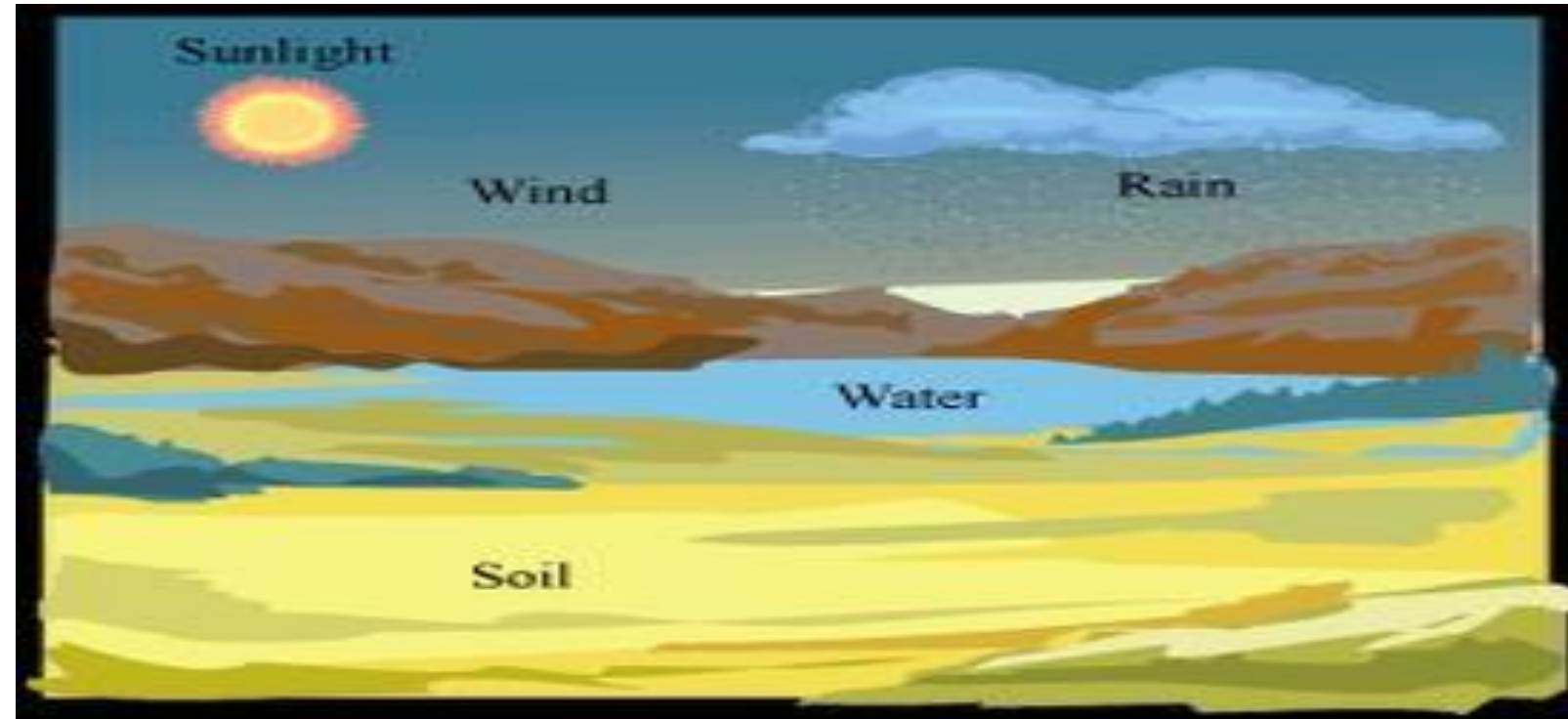


- Warm temperature, adequate rainfall
- Maintain climate and rainfall
- Protect biodiversity
- Soil enrichment
- Fast conversion of organic matter
- Maintain nutrient cycle
- Maintain ecosystem





STRUCTURE & FUNCTION



1. Abiotic components:

Physical components found in soil & atmosphere

Example: Climatic factors & minerals

2. Biotic components:

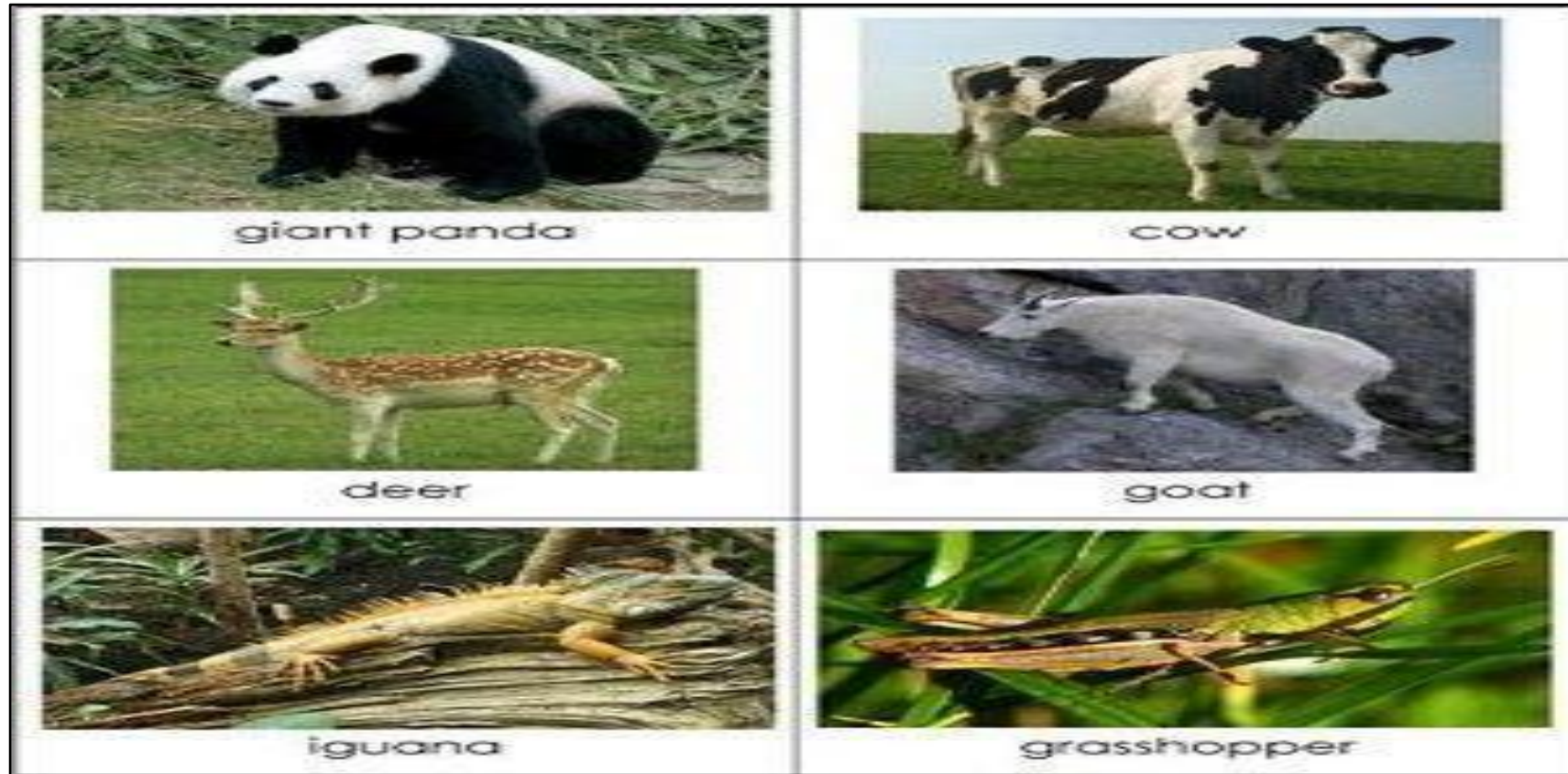
1. **Producers:** Photosynthesis process

Example: Trees, shrubs, vegetation





STRUCTURE & FUNCTION



2. Consumers

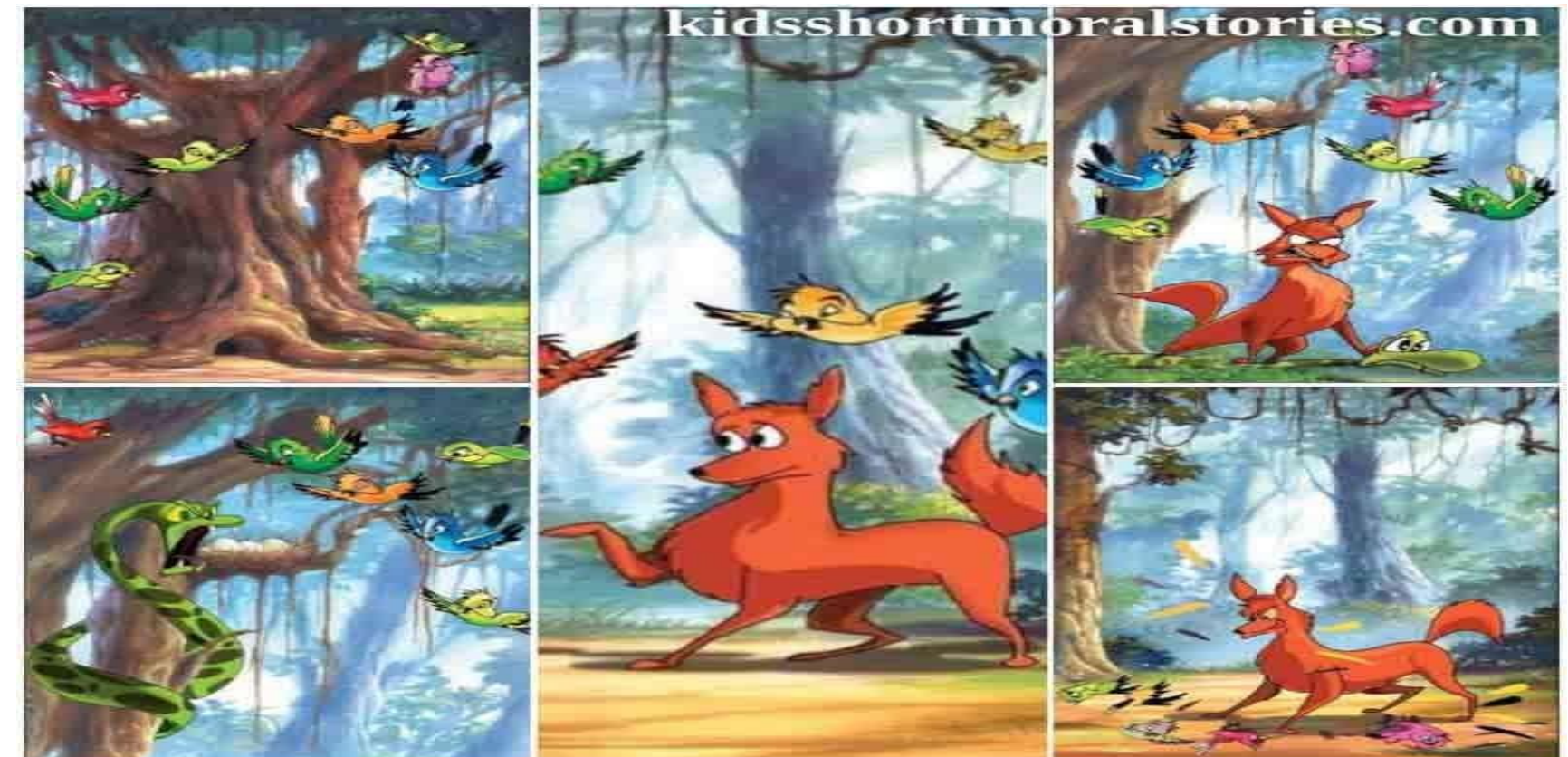
a. Primary consumers(herbivore): depends Plant (eaters)

Example: ants,flies insect,deer,mice

b. secondary consumers (primary carnivore):

depends herbivores

Example: birds. Snake, fox

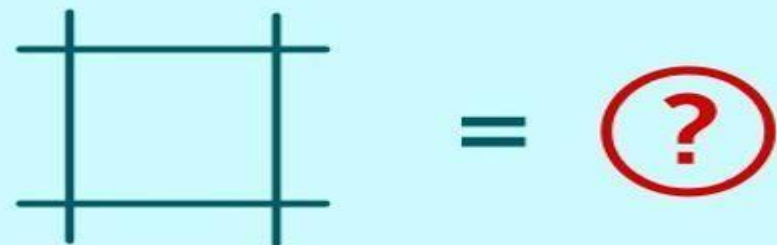
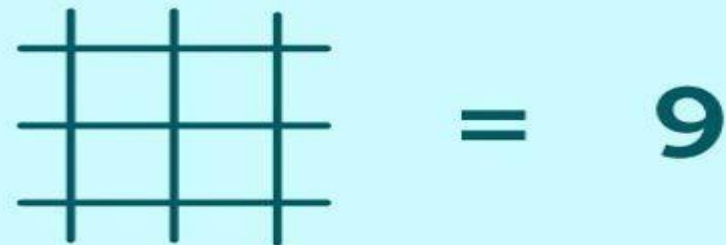




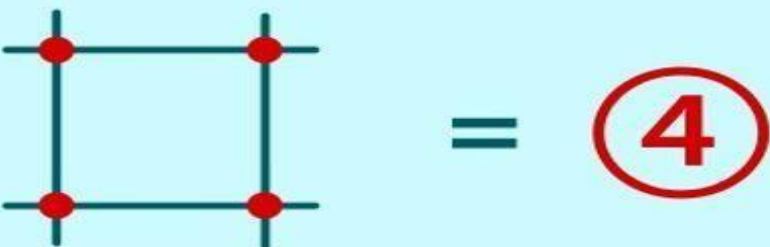
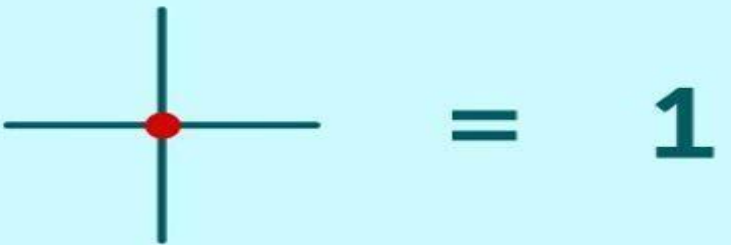
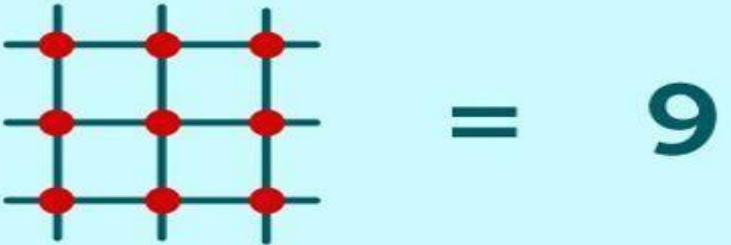
Activity



**Insert
the missing number.**



**4. The numbers indicate
the number of crossed lines
in each shape.**



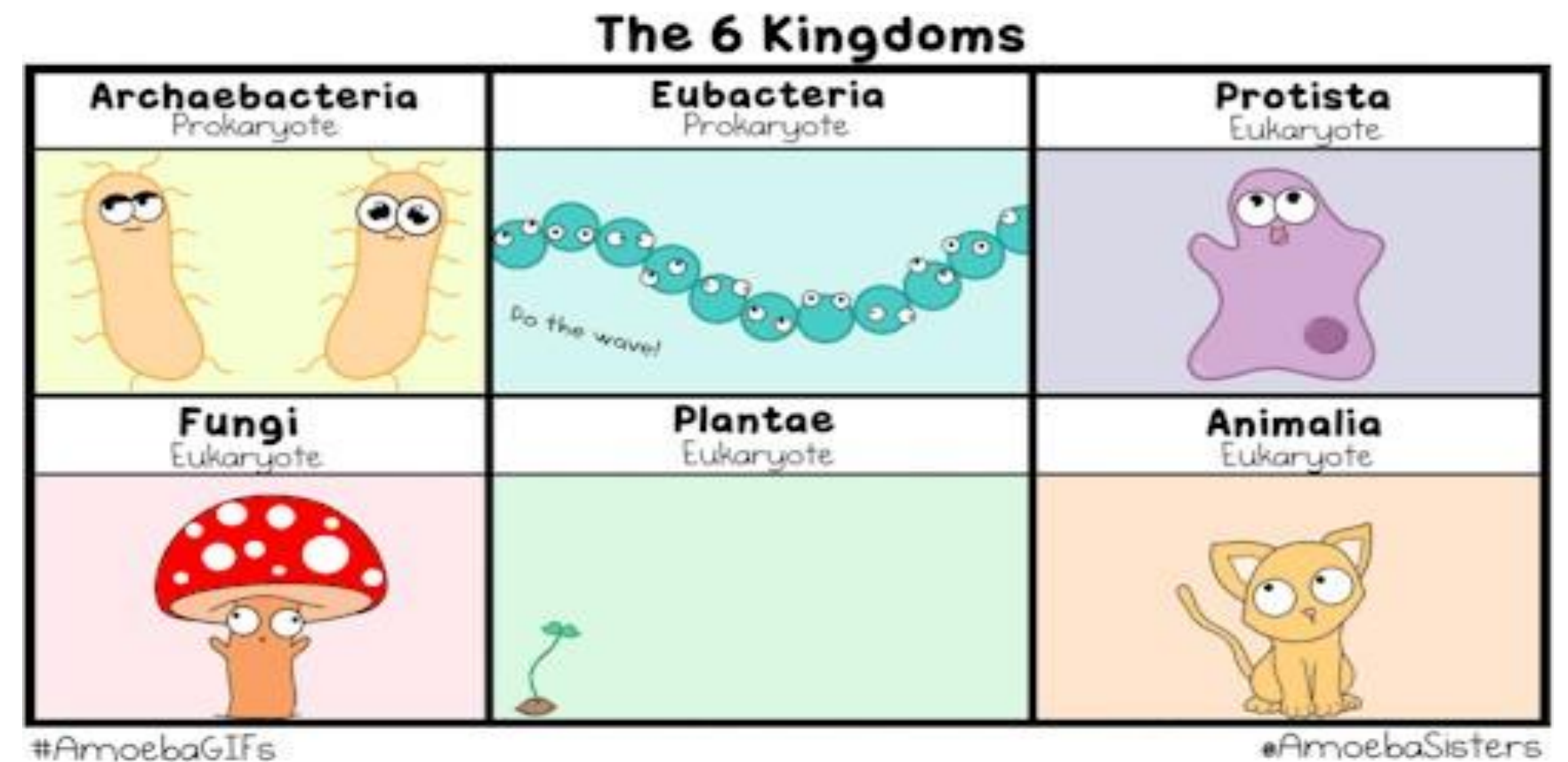


STRUCTURE & FUNCTION



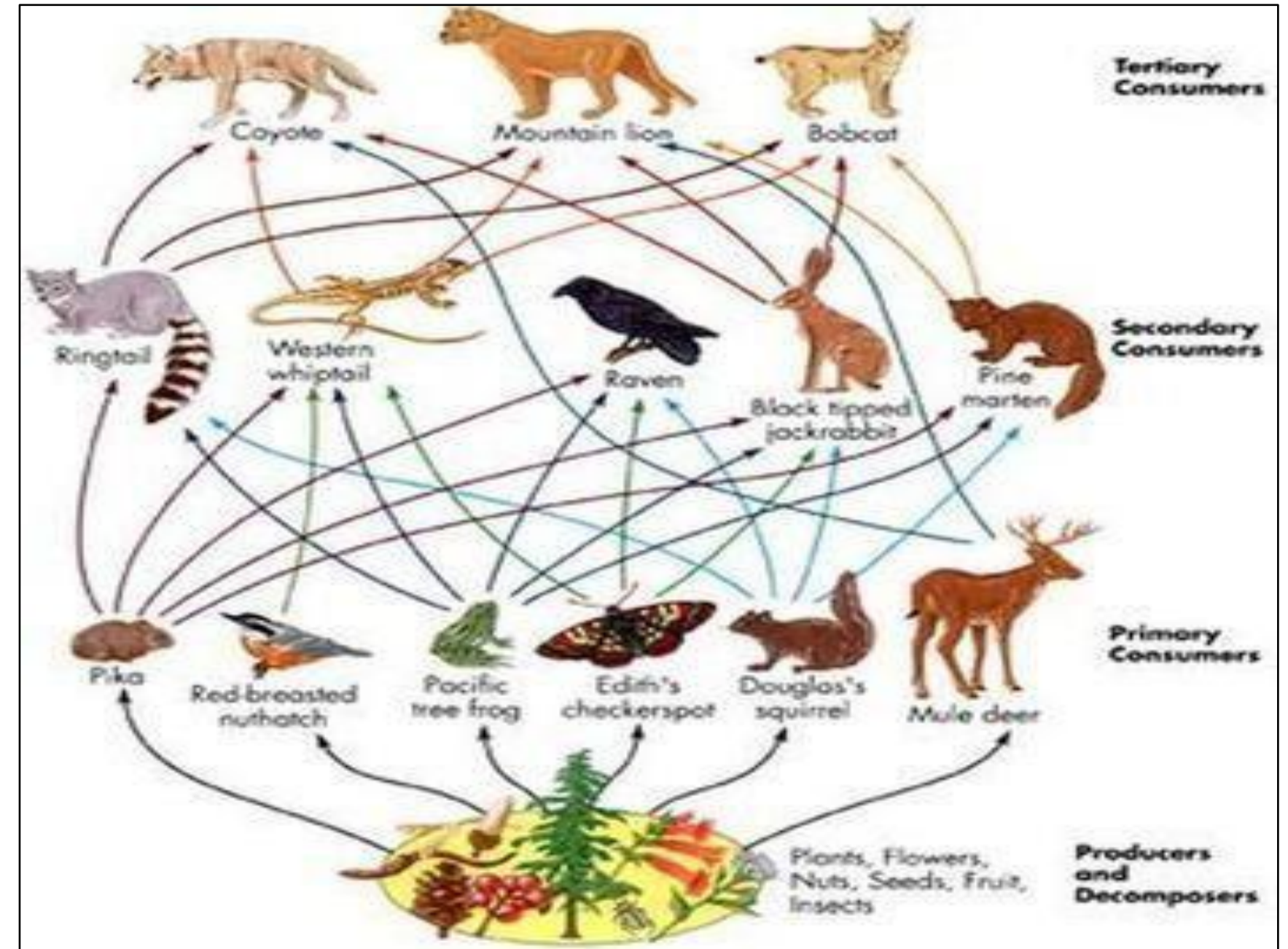
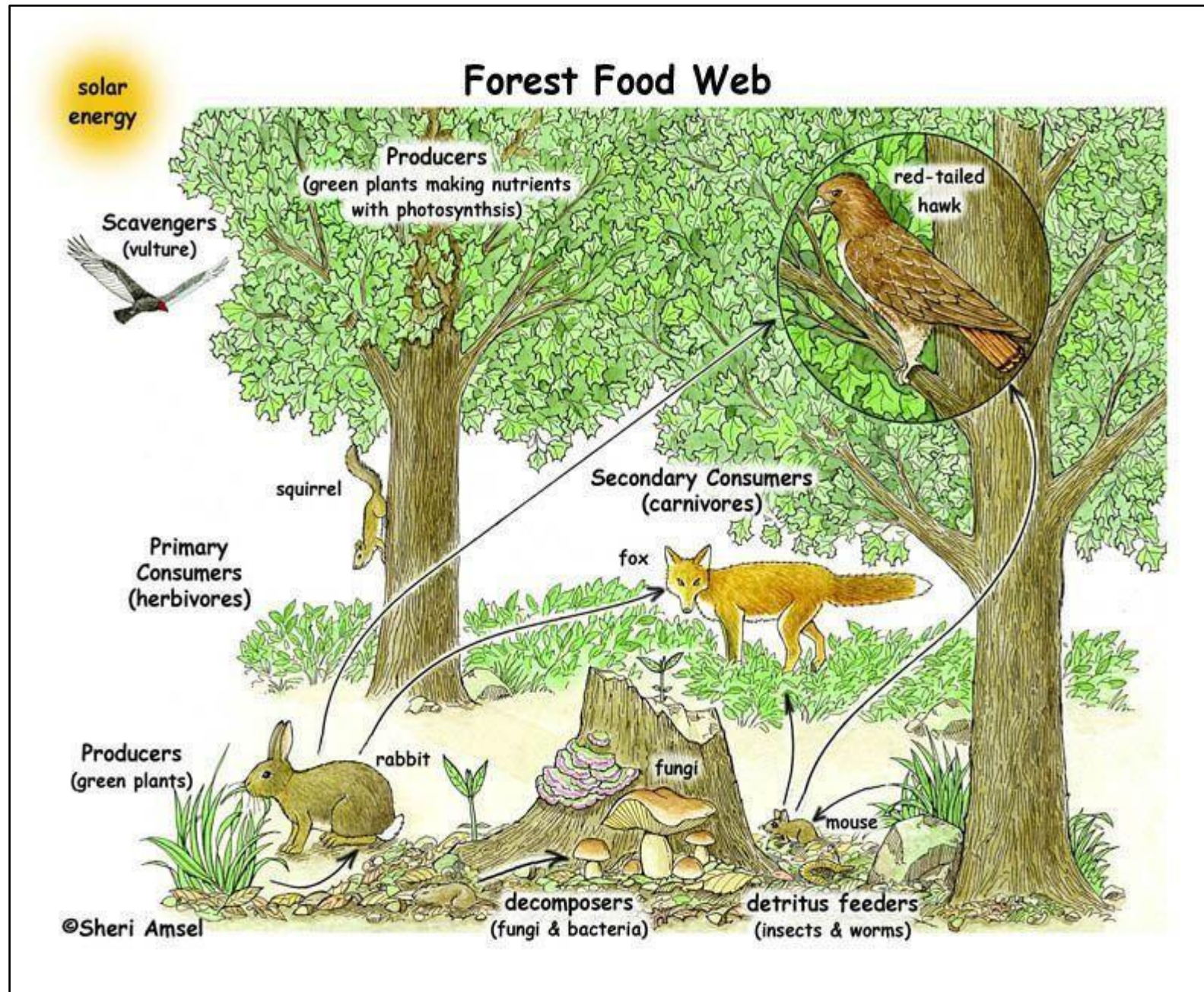
c. Tertiary consumers (primary carnivore): depends primary carnivore
Example: lion tiger

4. Decomposers: decompose dead plant & animals
Example: Bacteria & fungi





FOREST FOOD CHAIN





ASSESSMENT



1. Draw the flow chart for forest ecosystem



SUMMARY



REFERENCES



1. Dr. A.Ravikrishnan, Environmental science & Engineering” Srikrishna hitech Pub. Co. Ltd,2013.
2. G.Tayer Miller :Environmental Science”, Cenage Learning India Pvt Ltd, 2011.
3. Benny joseph, “Environmental science & engineering” Tata McGraw-Hill.Pub.Co.Ltd. New Delhi.2009.