Reading Comprehension 1

▪ Paragraph: A butterfly begins life as a tiny egg on a leaf. Inside the egg grows a caterpillar, which soon hatches and starts eating the plant around it. After growing quickly, the caterpillar forms a chrysalis, where its body is reorganized into the adult stage. When the transformation is complete, the butterfly emerges, dries its wings, and flies away to feed on nectar and lay new eggs. This repeating sequence is called a life cycle and helps butterflies survive from one generation to the next.

– **Question:** What is the first stage of a butterfly’s life cycle?
— Option A: Caterpillar
— Option B: Chrysalis
— Option C: Egg
— Option D: Adult butterfly

— Correct Answer: C

– **Question:** Why does the caterpillar eat so much?
— Option A: To store energy for the chrysalis stage
— Option B: To avoid predators
— Option C: To dry its wings
— Option D: To make nectar

— Correct Answer: A

– **Question:** Where does the butterfly emerge from?
— Option A: An egg
— Option B: A chrysalis
— Option C: A flower
— Option D: A leaf vein

— Correct Answer: B

– **Question:** What do adult butterflies mainly eat?
— Option A: Leaves
— Option B: Nectar
— Option C: Soil
— Option D: Caterpillars

— Correct Answer: B

– **Question:** The term “life cycle” in this paragraph refers to…
— Option A: The length of a butterfly’s wings

— Option B: The repeating sequence of stages from egg to adult
— Option C: The plants butterflies visit
— Option D: Seasonal weather changes

— Correct Answer: B

Reading Comprehension 2

▪ Paragraph: Many cities promote recycling to reduce the amount of waste sent to landfills. Recycling involves collecting materials such as paper, glass, metals, and certain plastics, processing them, and turning them into new products. This practice saves natural resources, lowers energy use compared with producing goods from raw materials, and decreases greenhouse-gas emissions. However, contamination—like food scraps mixed with clean paper—can cause entire batches to be discarded, so correct sorting is essential for recycling programs to succeed.

– **Question:** Which material is commonly collected for recycling?
— Option A: Food scraps
— Option B: Metal cans
— Option C: Garden soil
— Option D: Ceramics only

— Correct Answer: B

– **Question:** One main environmental benefit of recycling is…
— Option A: Increasing landfill size
— Option B: Saving natural resources
— Option C: Raising energy consumption
— Option D: Producing more raw materials

— Correct Answer: B

– **Question:** What problem can contamination cause?
— Option A: Lower energy use
— Option B: Discarding whole recycling batches
— Option C: Higher paper quality
— Option D: Faster processing times

— Correct Answer: B

– **Question:** Which of these actions helps recycling succeed?
— Option A: Mixing glass with food waste
— Option B: Correctly sorting materials

— Option C: Burning plastic bottles
— Option D: Burying metals in soil

— Correct Answer: B

– **Question:** Compared with making products from raw resources, recycling usually…
— Option A: Requires more energy
— Option B: Uses less energy
— Option C: Generates no emissions at all
— Option D: Needs no processing facilities

— Correct Answer: B

Reading Comprehension 3

▪ Paragraph: Photosynthesis in most plants follows the C3 pathway, where carbon dioxide is fixed by the enzyme RuBisCO inside mesophyll cells. In hot, dry climates, C4 plants such as maize have evolved an additional step: they first capture CO_2 into four-carbon molecules in outer cells, then shuttle it to bundle-sheath cells for the Calvin cycle. This adaptation limits photorespiration and improves water-use efficiency. Consequently, C4 crops often outperform C3 crops in tropical environments.

– **Question:** Which enzyme fixes CO_2 in the C3 pathway?
— Option A: ATP synthase
— Option B: RuBisCO
— Option C: Chlorophyll
— Option D: Amylase

— Correct Answer: B

– **Question:** The term “bundle-sheath cells” appears in…
— Option A: C3 plants only
— Option B: C4 plants only
— Option C: Both C3 and C4 plants
— Option D: Neither plant type

— Correct Answer: C

– **Question:** Why do C4 plants waste less water?
— Option A: They open stomata at night only
— Option B: They store CO_2 indefinitely

— Option C: They reduce photorespiration in hot climates
— Option D: They have no chloroplasts in mesophyll cells

— Correct Answer: C

– **Question:** Maize outperforms wheat in the tropics mainly because maize…
— Option A: Has deeper roots
— Option B: Uses the C4 pathway
— Option C: Contains more chlorophyll B
— Option D: Fixes nitrogen from air

— Correct Answer: B

– **Question:** Photorespiration is best described as…
— Option A: Light-driven sugar synthesis
— Option B: Loss of fixed carbon as CO_2
— Option C: Uptake of oxygen at night
— Option D: Breakdown of chlorophyll pigments

— Correct Answer: B