航空與交通工程
Practice Worksheet

A. Vocabulary - Write the English word

Write the correct English word for each Chinese meaning.

1. 航空 (n.) _____

2. 航太 (n./adj.) _____

3. 空氣動力學 (n.) _____

4. 機身 (n.) _____

5. 駕駛艙 (n.) _____

6. 跑道 (n.) _____

7. 航廈 (n.) _____

8. 機棚 (n.) _____

9. 高度 (n.) _____

10. 亂流 (n.) _____

11. 推力 (n.) _____

12. 升力 (n.) _____

13. 阻力 (n.) _____

14. 馬赫數 (n.) _____

15. 超音速的 (adj.) _____

B. Grammar - Choose the correct answer

1. _____ studies how air flows around aircraft.
   - (A) Aerodynamics
   - (B) Logistics
   - (C) Navigation
   - (D) Telematics

2. The _____ records all flight data and cockpit conversations.
   - (A) black box
   - (B) transponder
   - (C) autopilot
   - (D) radar

3. _____ trains use magnetic levitation to travel at high speeds.
   - (A) Maglev
   - (B) Diesel
   - (C) Steam
   - (D) Turboprop

4. _____ sensors create 3D maps of the environment for self-driving cars.
    (A) LiDAR   (B) GPS
    (C) Radar   (D) Sonar

5. _____ pricing charges drivers for entering congested city centers.
    (A) Congestion   (B) Toll
    (C) Premium   (D) Dynamic

6. The _____ houses passengers and cargo inside an aircraft.
    (A) fuselage   (B) cockpit
    (C) hangar   (D) runway

7. _____ aviation fuel is made from waste oils and reduces emissions.
    (A) Sustainable   (B) Traditional
    (C) Fossil   (D) Synthetic

8. High-speed _____ connects major cities in under two hours.
    (A) rail   (B) freight
    (C) cargo   (D) shipping

9. _____ zones restrict vehicle access to improve safety for walkers.
    (A) Pedestrian   (B) Loading
    (C) Parking   (D) Construction

10. _____ vehicles combine an engine with an electric motor.
    (A) Hybrid   (B) Diesel
    (C) Manual   (D) Autonomous

C. Listening - Go to learn.chparenting.com to listen

1. 新空中交通管制系統的優勢是什麼?
    (A) Flights were delayed due to wind shear
    (B) All flights were cancelled permanently
    (C) The airport was closed for construction
    (D) Wind shear improved flying conditions

2. 電動飛機的挑戰是什麼?
    (A) Metro expansion will reduce congestion
    (B) The metro system will be closed
    (C) The city will build more highways
    (D) Traffic congestion is not a concern

3. 超級高鐵的速度有多快?
    (A) Flying taxis are being developed
    (B) All aircraft must use runways
    (C) Electric aircraft are impossible
    (D) Urban air travel has been banned

4. 自動駕駛汽車面臨什麼問題?
    (A) Self-driving cars use multiple technologies
    (B) Autonomous vehicles only use GPS
    (C) Human drivers are still required
    (D) LiDAR is used only in aviation

5. 機場安檢有什麼新變化?

    (A) Alternative fuels can greatly reduce aviation emissions
    (B) Aviation emissions cannot be reduced
    (C) Sustainable fuel is more polluting
    (D) Only electric planes can be clean

D. Reading - Go to learn.chparenting.com to read the passage

1. What three trends are shaping future transportation?

    (A) Electrification, automation, connectivity
    (B) Speed, size, cost
    (C) Fossil fuels, highways, airports
    (D) Regulation, taxation, subsidies

2. What could autonomous driving reduce?

    (A) Vehicle prices
    (B) Accidents from human error
    (C) Fuel consumption only
    (D) Number of roads

3. What does V2X communication enable?

    (A) Vehicles communicating with each other and infrastructure
    (B) Only driver-to-driver communication
    (C) Internet browsing while driving
    (D) Automatic fuel purchasing

4. What challenge does aviation face?

    (A) Too many passengers
    (B) Significant carbon footprint
    (C) Lack of airports
    (D) Declining demand

5. What challenges do transportation innovations face?

    (A) Only cost issues
    (B) Regulatory, infrastructure, and acceptance challenges
    (C) No challenges at all
    (D) Only technical problems