(The respiratory system (lungs and gas exchange))

Q1.(2020)

- (many) alveoli
  - provide a large(r) surface area (**:** volume)

- capillaries are thin
  or alveoli / capillary walls are thin **or** one cell thick
  or capillaries are close to the alveoli
  - which provides short diffusion path (for oxygen / carbon dioxide)

- breathing (mechanism) moves air in and out
  or lungs are ventilated
  - to bring in (fresh) oxygen
  - to remove carbon dioxide
  - to maintain a concentration / diffusion gradient

- large capillary network (around alveoli)
  or good blood supply
  - to remove oxygen(ated blood) quickly
  - to bring carbon dioxide to the lungs quickly
  - to maintain a concentration / diffusion gradient

Q2.(2024)

large surface / area

(large) capillary network
or
good / efficient blood supply

walls are thin
or
walls are one cell thick

Q3.(2024)

less (aerobic) respiration

(so) less energy (released)

(results in) less muscle contraction
or
(results in) reduced metabolism
or

(results in) increased breathing rate / depth
or
(results in) increased heart rate

OR

(more) anaerobic respiration (1)

(so) lactic acid produced (1)

(results in) muscle fatigue
or
(results in) less muscle contraction
or
(results in) increased breathing rate / depth
or
(results in) increased heart rate (1)