

(Relative atomic mass, isotopes, and abundance)

Q1. (2020)

$$\frac{(203 \times 30) + (205 \times 70)}{100}$$

or

$$\frac{6090 + 14\,350}{100}$$

$$= 204.4$$

Q2. (2021)

(atoms with the) same number
of protons

(but with) different numbers of
neutrons

Q3. (2021)

$$(A_r =) \frac{(69 \times 60) + (71 \times 40)}{100}$$

$$= 69.8$$

Q4. (2022)

(relative atomic mass =)

$$\frac{(90.48 \times 20) + (0.27 \times 21) + (9.25 \times 22)}{100}$$

$$= 20.1877$$

$$= 20.2$$

Q5. (2023)

(A_r =)

$$\frac{(6 \times 7.6) + (7 \times 92.4)}{100}$$

$$= 6.924$$

$$= 6.9$$

Q6. (2024)

atoms with the same number of
protons

with different numbers of
neutrons