

Namakan jenis mutasi kromosom berdasarkan kandungan kromosom dan kemudian padankan dengan ciri-ciri pesakit. /Name the types of chromosome mutation based on the chromosome contents and then, match with the characteristics of the patients. **TP2**

Sindrom Turners
Turner syndrome

Sindrom Down
Down syndrome

Sindrom Klinefelter
Klinefelter syndrome

Jenis mutasi kromosom <i>Types of chromosome mutation</i>	Lebih atau kekurangan kromosom <i>Extra or insufficient chromosomes</i>	Ciri-ciri pesakit <i>Characteristics of the patient</i>
(a)	Lebih satu kromosom pada kromosom ke-21 (autosom) <i>One extra chromosome at the 21st chromosome (autosome)</i>	Bahu sempit, testis kecil, mandul <i>Narrow shoulders, small testes, sterile</i>
(b)	Lebih satu kromosom seks X pada lelaki <i>One extra X chromosome in males</i>	Tiada kitar haid dan mandul <i>Absence of the menstrual cycle, sterile</i>
(c)	Kekurangan satu kromosom X pada perempuan <i>Lacks one X chromosome in females</i>	Terencat akal, mata sepet, jari dan leher pendek <i>Mentally retarded, slanted eyes, short fingers and neck</i>

Tandakan (✓) bilangan kromosom dan kandungan kromosom bagi mutasi kromosom dalam jadual di bawah. /Tick (✓) the number of chromosomes and the chromosome contents of the chromosome mutations in the table below. **TP2**

Jenis mutasi kromosom <i>Types of chromosome mutation</i>	Bilangan kromosom <i>Number of chromosomes</i>	Kandungan kromosom <i>Chromosome content</i>
(a) Sindrom Down <i>Down syndrome</i>	<input type="checkbox"/> 45 <input type="checkbox"/> 47	<input type="checkbox"/> 45 + XX <input type="checkbox"/> 47 + XX <input type="checkbox"/> 45 + XY
(b) Sindrom Klinefelter <i>Klinefelter syndrome</i>	<input type="checkbox"/> 45 <input type="checkbox"/> 47	<input type="checkbox"/> 45 + XX <input type="checkbox"/> 44 + XO <input type="checkbox"/> 44 + XXY
(c) Sindrom Turner <i>Turner syndrome</i>	<input type="checkbox"/> 45 <input type="checkbox"/> 47	<input type="checkbox"/> 45 + XY <input type="checkbox"/> 44 + XO <input type="checkbox"/> 44 + XXY