|  |
| --- |
| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Stem Cells

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  | 1F |  E |  R |  T |  I |  L |  I |  S |  A |  T |  I |  O |  N |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | 2D |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 3T |  O |  T |  I |  P |  O |  T |  E |  N |  T |  |  |  |  |  | 4S |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  F |  |  |  |  |  |  |  | 5E |  |  |  |  P |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  F |  |  |  |  | 6G |  E |  R |  M |  L |  A |  Y |  E |  R |  S |  |  | 7U |  |  |
|  |  |  |  |  |  | 8M |  |  |  |  E |  |  |  |  |  |  |  |  B |  |  |  |  R |  |  |  |  |  N |  |  |
|  | 9N |  U |  C |  L |  E |  U |  S |  |  |  R |  |  |  |  | 10F |  |  |  R |  |  |  |  M |  | 11D |  |  |  D |  |  |
|  |  |  |  |  |  |  L |  |  |  |  E |  |  |  |  |  O |  |  |  Y |  |  |  |  |  |  O |  |  |  I |  |  |
|  |  |  |  | 12M |  U |  T |  A |  G |  E |  N |  |  | 13M |  E |  L |  A |  N |  O |  M |  A |  | 14P |  |  W |  |  |  F |  |  |
|  |  |  | 15E |  |  |  I |  |  |  |  T |  | 16C |  |  |  L |  |  |  |  |  |  |  L |  |  N |  |  |  F |  |  |
|  |  |  |  C |  |  |  P |  | 17E |  P |  I |  T |  H |  E |  L |  I |  A |  L |  T |  I |  S |  S |  U |  E |  S |  |  |  E |  |  |
|  |  |  |  T |  |  |  O |  |  |  |  A |  |  R |  |  |  C |  |  |  |  |  |  |  R |  |  Y |  |  |  R |  |  |
|  |  |  |  O |  |  |  T |  |  |  |  T |  |  O |  |  |  L |  |  |  |  |  |  |  I |  |  N |  |  |  E |  |  |
|  |  |  |  D |  | 18M |  E |  S |  O |  D |  E |  R |  M |  | 19F |  E |  T |  U |  S |  |  |  |  P |  |  D |  |  |  N |  |  |
|  |  |  |  E |  |  |  N |  |  |  |  |  |  O |  |  |  |  |  |  |  |  |  |  O |  |  R |  |  |  T |  |  |
|  |  |  |  R |  |  |  T |  | 20M |  I | 21T |  O |  S |  I |  S |  |  | 22O |  V |  U |  L |  A |  T |  I |  O |  N |  |  I |  |  |
|  |  |  |  M |  |  |  |  |  |  |  R |  |  O |  |  |  |  |  |  |  |  |  |  E |  |  M |  |  |  A |  | 23B |
|  |  |  |  |  |  |  |  |  |  |  O |  | 24M |  E |  I | 25O |  S |  I |  S |  |  | 26A |  N |  T |  E |  N |  A |  T |  A |  L |
|  |  |  |  |  |  |  |  |  |  |  P |  |  E |  |  |  N |  |  |  |  |  |  |  T |  |  |  |  |  E |  |  A |
|  |  |  |  |  |  |  |  |  |  |  H |  |  |  |  | 27C |  A |  N | 28C |  E |  R |  |  |  |  |  |  |  D |  |  S |
|  |  |  |  |  |  | 29S |  |  |  |  O |  |  |  |  |  O |  |  |  L |  |  |  |  |  |  |  |  |  |  |  T |
|  |  | 30Z |  Y |  G |  O |  T |  E |  |  |  B |  |  |  | 31E |  G |  G |  |  O |  |  |  |  |  |  |  |  |  |  |  O |
|  |  |  |  |  |  |  E |  |  |  |  L |  |  |  |  |  E |  |  |  N |  |  |  |  |  |  |  |  |  |  |  C |
|  |  |  |  |  |  |  M |  |  | 32P |  A |  R |  T |  H |  E |  N |  O |  T |  E |  |  |  |  |  |  |  |  |  |  |  Y |
|  |  |  |  |  |  |  C |  |  |  |  S |  |  |  |  |  E |  |  |  |  |  |  |  |  |  |  |  |  |  |  S |
|  |  |  |  |  | 33M |  E |  T |  A |  S |  T |  A |  S |  I |  S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  T |
|  |  |  |  |  |  |  L |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  L |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

|  |  |
| --- | --- |
| **Across****1.** union of egg and sperm to form a zygote**3.** refers to a cell that can differentiate into all different cell types**6.** ectoderm, mesoderm and endoderm**9.** membrane bound organelle containing the genetic material DNA**12.** environmental factor that causes gene mutations**13.** a tumour of melanin-forming cells**17.** cover flat surfaces**18.** the middle layer of cells or tissues of an embryo**19.** developing human baby from week nine to birth**20.** cell division that results in two daughter cells**22.** release of an egg from the ovary**24.** cell division that results in four daughter cells**26.** pre-birth developement in humans**27.** a disease caused by an uncontrolled division of abnormal cells in a part of the body**30.** fertilised egg that results from the fusion of haploid gametes**31.** female gamete**32.** potential source of embryonic cells**33.** a process where malignant tumours spread throughout the body | **Down****2.** to become more specialised**4.** male gamete**5.** early stage of a developing organism**7.** unspecialised**8.** refers to a cell that can differentiate into a number of closely related cells**10.** structure in an ovary where an egg develops**11.** a defect involving chromosome 21**14.** a cell that can differentiate into many different cell types**15.** a primary germ layer**16.** thread-like structure composed of DNA and protein **21.** cells of the outer layer of the blastocyst**23.** a hollow fluid-filled structure**25.** gene that signals cells to continue dividing**28.** replicate a fragment of DNA**29.** an undifferentiated cell of a multicellular organism |