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

Stem Cells

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

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| --- | --- |
| **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 |