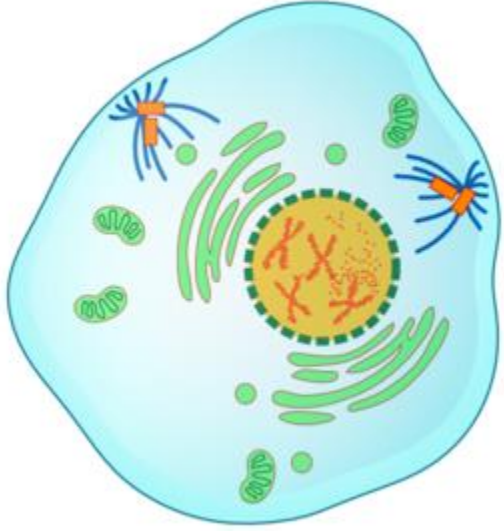
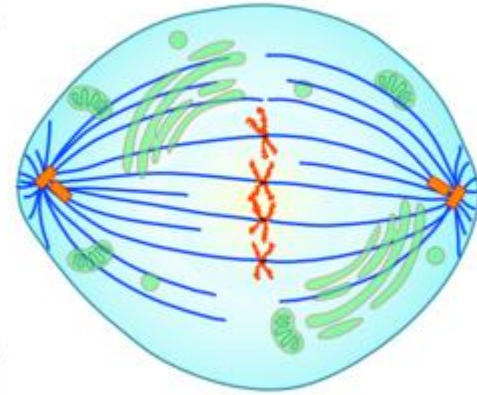


1



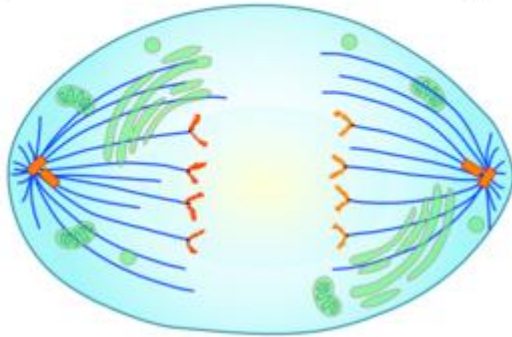
This phase of mitosis is ____? ____

2



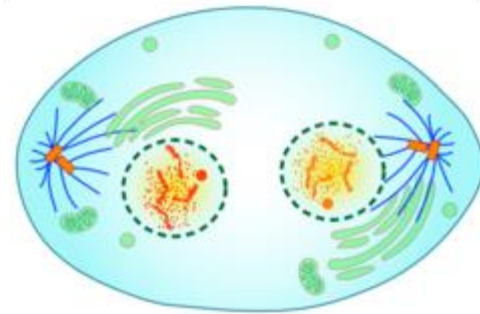
This phase of mitosis is ____? ____

3



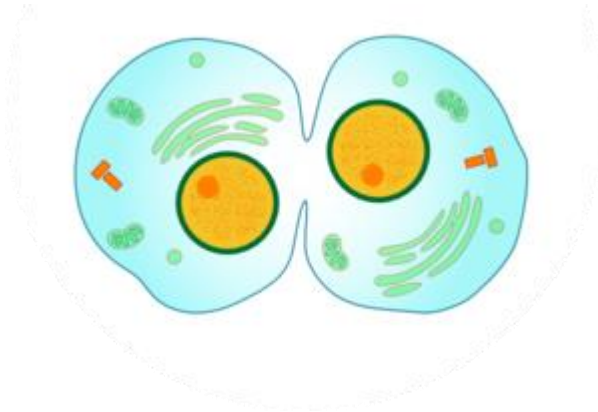
This phase of mitosis is ____? ____

4



This phase of mitosis is ____? ____

5



This phase of mitosis is _____? _____

6

What are the stages of mitosis in chronological order?

- Anaphase, prophase, metaphase, telophase
- Metaphase, anaphase, telophase, prophase
- Prophase, metaphase, anaphase, telophase
- Telophase, anaphase, metaphase, prophase

7

What is the function of centrioles?

8

Match the terms with the appropriate stages in the answer:

Migration, Shortening and Thickening, Cytokinesis, Prophase.

- Telophase, Anaphase, Prophase, centrioles forming
- Anaphase, Prophase, Metaphase, microtubules
- Anaphase, Prophase, Telophase, centrioles forming
- Metaphase, Anaphase, Telophase, microtubules

9

Spindle fibers are produced by the
_____?_____

10

A cell with 12 chromosomes undergoes mitosis and cell division. How many daughter cells are produced and what number of chromosomes do they have?

11

The process where the cytoplasm divides and forms two new cells is called
_____?_____

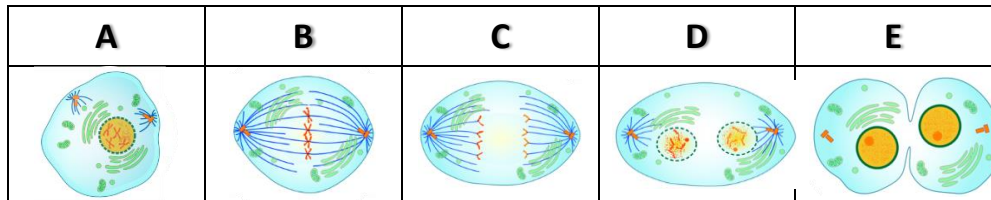
12

Cytokinesis begins in:

- Prophase**
- Metaphase**
- Anaphase**
- Telophase**

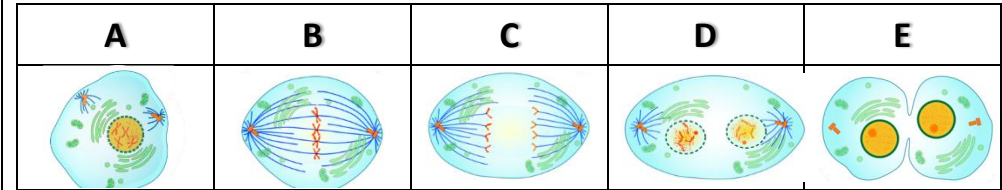
13

During which phase does DNA replication occur?



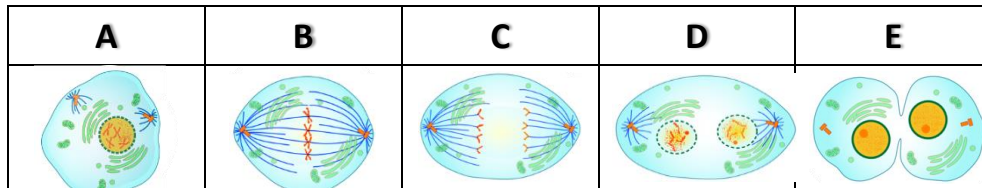
14

During which phase do chromosomes become visible?



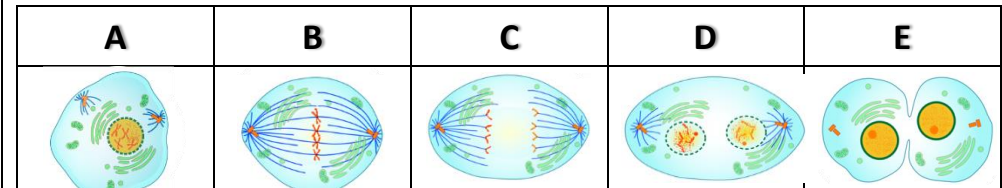
15

During which phase of mitosis do the chromosomes line up along the middle of the dividing cell?



16

What is the final phase of mitosis?



17

Condensed genetic material is called
_____?_____

18

What structure guides the movement of
chromosomes?

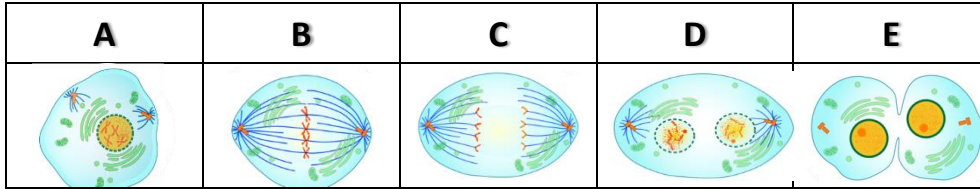
19

Mitosis results in the formation of
_____?_____

20

What does a cell do after it completes telophase
and cytokinesis?

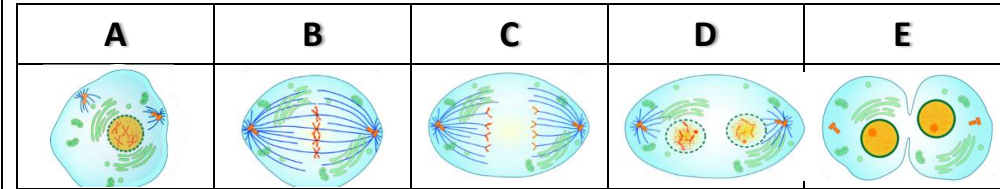
21



Anaphase begins when the pairs of sister chromatids separate.
Which picture illustrates this?

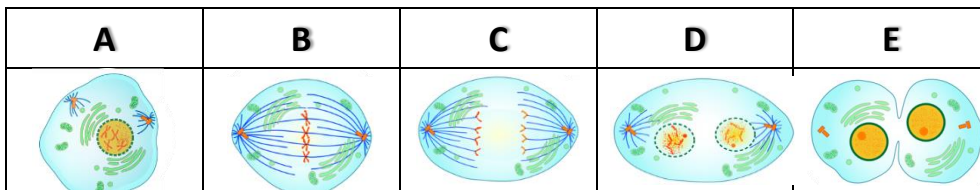
22

The chromatids remain lined up between the poles of the cell during metaphase.
Which picture illustrates this?



23

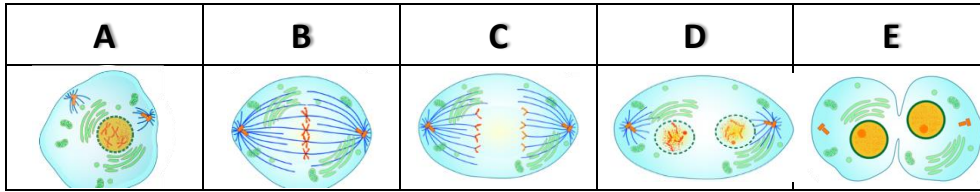
The chromosomes arrive at the poles in telophase.
Which picture illustrates this?



24

Division of the cytoplasmic components is called cytokinesis.
Which picture illustrates this?

25



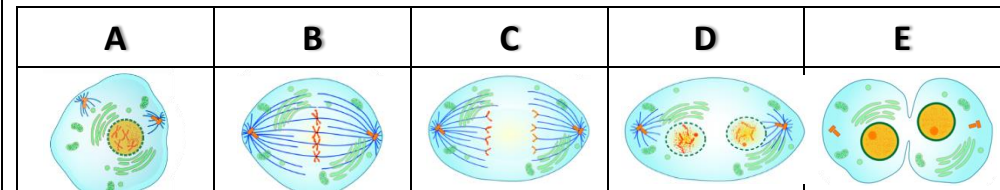
After cytokinesis, the daughter cells will enter interphase.

Which picture illustrates this?

26

During Prophase, the DNA and proteins start to condense. The two centrioles move toward the opposite end of the cell in animals or microtubules are assembled in plants to form a spindle. The nuclear envelope and nucleolus also start to break up.

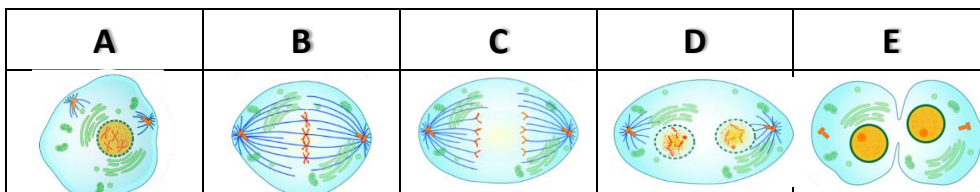
Which picture illustrates this?



27

During Anaphase, the spindle fibers attached to the two sister chromatids of each chromosome contract and separate chromosomes which move to opposite poles of the cell.

Which picture illustrates this?

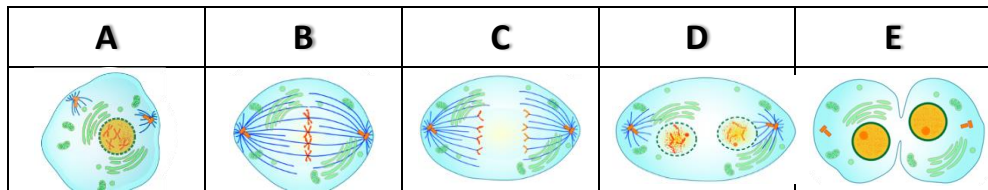


28

During Metaphase, the spindle apparatus attaches to sister chromatids of each chromosome. All the chromosomes are line up at the equator of the spindle. They are now in their most tightly condensed form.

Which picture illustrates this?

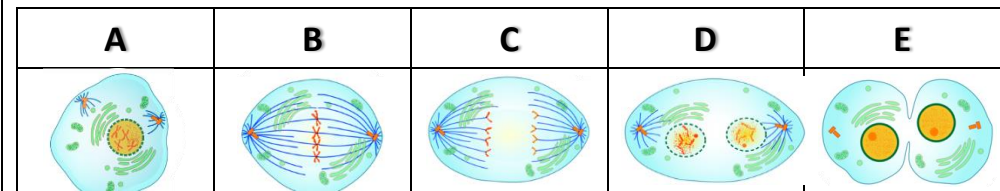
29



In Telophase, as the 2 new cells pinch in half (animal cells) or a cell plate forms (plant cells), the chromosomes become less condensed again and reappear as chromatin. New membrane forms nuclear envelopes and the nucleolus is re-formed.
Which picture illustrates this?

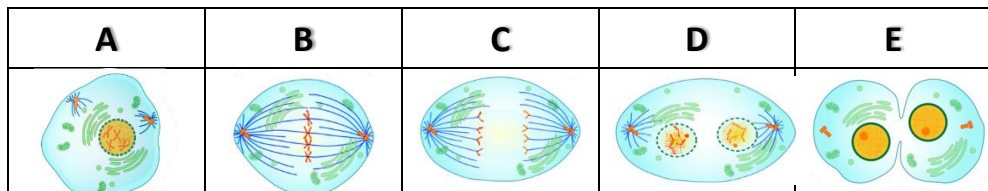
30

During which phase do chromosomes first become visible?



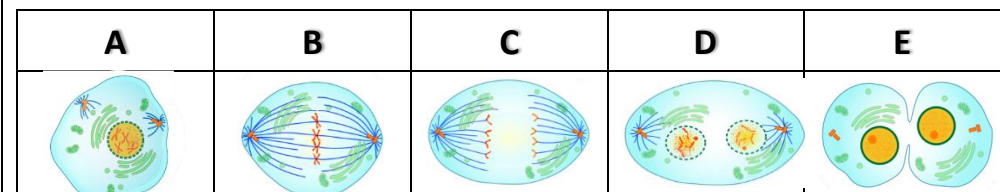
31

Which phase occurs directly after metaphase?



32

The phase before telophase is:



33

Early in the _____? _____ stage the chromatin fibers shorten into chromosomes that are visible under a light microscope.

34

The centromeres split separating the two members of each chromatid pair – which then move to the opposite poles of the cell during _____? _____

35

After separation, the chromatids are called _____? _____.

36

During _____? _____

- The identical sets of chromosomes - which are by this stage at opposite poles of the cell, uncoil and revert to the long, thin, thread-like chromatin form.
- A new nuclear envelope forms around each chromatin mass.
- Nucleoli appear.
- Eventually the mitotic spindle breaks-up.

37

True or False:

Mitosis occurs only in eukaryotes

38

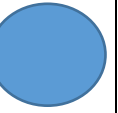
Daughter cells are genetically
_____?_____
to each other and to the parent cell
that divided to produce them.

39

One difference between cell division in
plant cells and in animal cells
is that plant cells have
_____?_____

40

Examples of cells that are produced through mitosis
include
_____?_____



Name _____

Mitosis Task Cards

1.	21.
2.	22.
3.	23.
4.	24.
5.	25.
6.	26.
7.	27.
8.	28.
9.	29.
10.	30.
11.	31.
12.	32.
13.	33.
14.	34.
15.	35.
16.	36.
17.	37.
18.	38.
19.	39.
20.	40.