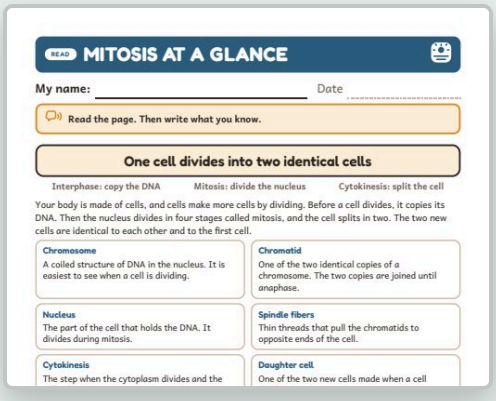
6TH–8TH GRADE · LIFE SCIENCE

DIAGRAMS

MITOSIS WORKSHEETS

Label a dividing cell, fill in the paragraph, complete the stages table, read data and draw the graph, sort prophase from telophase, and write short answers. Answer keys, a tracker and a family page. Print, or type your answers. PDF.


READ MITOSIS AT A GLANCE

My name: _____ Date _____

Read the page. Then write what you know.

One cell divides into two identical cells

Interphase: copy the DNA Mitosis: divide the nucleus Cytokinesis: split the cell

Your body is made of cells, and cells make more cells by dividing. Before a cell divides, it copies its DNA. Then the nucleus divides in four stages called mitosis, and the cell splits in two. The two new cells are identical to each other and to the first cell.

Chromosome A coiled structure of DNA in the nucleus. It is easiest to see when a cell is dividing.

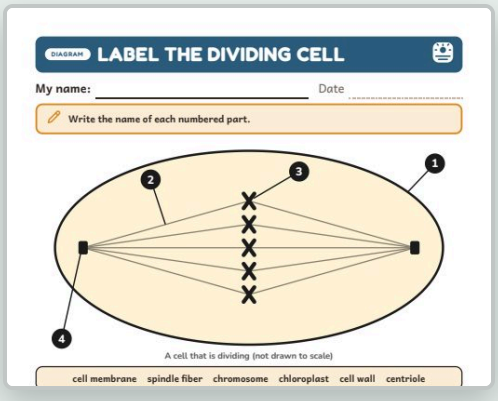
Chromatid One of the two identical copies of a chromosome. The two copies are joined until anaphase.

Nucleus The part of the cell that holds the DNA. It divides during mitosis.

Spindle fibers Thin threads that pull the chromatids to opposite ends of the cell.

Cytokinesis The step when the cytoplasm divides and the

Daughter cell One of the two new cells made when a cell


DIAGRAM LABEL THE DIVIDING CELL

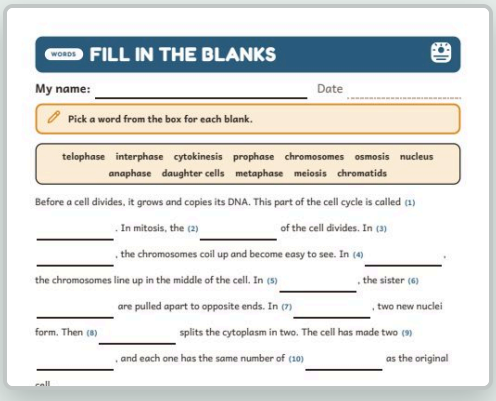
My name: _____ Date _____

Write the name of each numbered part.

1 2 3 4

A cell that is dividing (not drawn to scale)

cell membrane spindle fiber chromosome chloroplast cell wall centriole

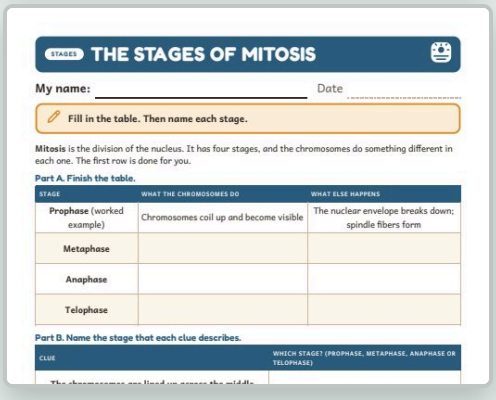

WORDS FILL IN THE BLANKS

My name: _____ Date _____

Pick a word from the box for each blank.

telophase interphase cytokinesis prophase chromosomes osmosis nucleus anaphase daughter cells metaphase meiosis chromatids

Before a cell divides, it grows and copies its DNA. This part of the cell cycle is called (1) _____. In mitosis, the (2) _____ of the cell divides. In (3) _____, the chromosomes coil up and become easy to see. In (4) _____, the chromosomes line up in the middle of the cell. In (5) _____, the sister (6) _____ are pulled apart to opposite ends. In (7) _____, two new nuclei form. Then (8) _____ splits the cytoplasm in two. The cell has made two (9) _____, and each one has the same number of (10) _____ as the original cell.


STAGES THE STAGES OF MITOSIS

My name: _____ Date _____

Fill in the table. Then name each stage.

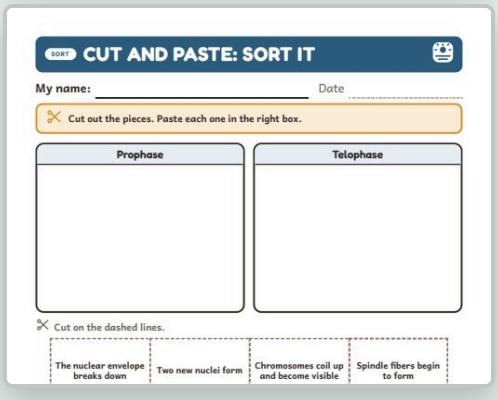
Mitosis is the division of the nucleus. It has four stages, and the chromosomes do something different in each one. The first row is done for you.

Part A. Finish the table.

STAGE	WHAT THE CHROMOSOMES DO	WHAT ELSE HAPPENS
Prophase (worked example)	Chromosomes coil up and become visible	The nuclear envelope breaks down; spindle fibers form
Metaphase		
Anaphase		
Telophase		

Part B. Name the stage that each clue describes.

CLUE	WHICH STAGE? (PROPHASE, METAPHASE, ANAPHASE OR TELOPHASE)
The chromosomes are lined up across the middle	


SORT CUT AND PASTE: SORT IT

My name: _____ Date _____

Cut out the pieces. Paste each one in the right box.

Prophase	Telophase

Cut on the dashed lines.

The nuclear envelope breaks down | Two new nuclei form | Chromosomes coil up and become visible | Spindle fibers begin to form


TRACKER MITOSIS TRACKER

STUDENT TEACHER UNIT DATES

PAGE	PAGE TYPE	ITEMS	RIGHT	DATE	NOTES
5	Label the Dividing Cell	4			
6	Fill In the Blanks	16			
7	The Stages of Mitosis	10			
8	Multiple Choice	8			
9	True or False? Fix It	8			
10	Read the Data, Draw the Graph	6			
11	Trace the Process	6			
12	Cut and Paste: Sort It	8			

25 Pages | **11 Page Types** | **74 Items** | **2 Answer Keys**

BRIGHT PATH SPED

START HERE

QUICK START

One complete kit for a mitosis unit in grades 6-8. Students read a reference page, label a dividing cell, fill in a paragraph, complete a stages table, answer questions, read data and draw a graph, trace the process and write short answers — on pages with room to work.

THREE STEPS

1. **Teach or review with the reference page**
   Page 4 has the steps of cell division, the six key words and a place for the student to write what they know. Read it together or hand it out as the first page.

2. **Hand over a page**
   Every student page opens with a name line and one short instruction. Nothing on it is written for you, so the student can start. Short answers have three or more lines and the explanations have five or six, so the page is the whole workspace.

3. **Check it, record it, send it home**
   The answer keys are pages 15 and 16. Record each page on the tracker (page 17), roll a group up on page 18, and send the family page (20). A filled example is on page 21.

WHICH PAGE, WHEN

WHEN…	USE…
Introducing or reviewing the unit	At a Glance, page 4 · Label the Dividing Cell, page 5
Checking the vocabulary	Fill In the Blanks, page 6 · Multiple Choice, page 8
Learning the stages in order	The Stages of Mitosis, page 7
Quick check or exit slip	True or False? Fix It, page 9
Reading data and graphing	Read the Data, Draw the Graph, page 10
Hands-on sorting	Cut and Paste, page 12
Writing about science	Trace the Process, page 11 · Short Answers, page 13 · Explain It, page 14

Everything inside (25 pages)

- **11 student pages** in 11 page types: a reference page, a diagram of a dividing cell to label, fill in, the stages of mitosis, multiple choice, true or false, data and graph, flow chart, cut and paste and two short-answer pages
- **74 scored items** on 10 pages
- **8 cut-and-paste pieces** on one sort mat
- **2 answer keys, 1 tracker, 1 class grid**, 1 team note, 1 family page, 1 filled example, 1 phrase bank, 1 binder cover and 6 divider tabs

Print or type

Every page prints clean in black and white. The name line, answer boxes, blanks and writing lines are type-in fields in any PDF reader: click one, type, then save. This is a fillable PDF, not a slideshow or a word-processor file. The graph and the cut-and-paste sort are for pencil and scissors.

READ MITOSIS AT A GLANCE

My name: _____ Date .....

Read the page. Then write what you know.

One cell divides into two identical cells

Interphase: copy the DNA **Mitosis: divide the nucleus** **Cytokinesis: split the cell**

Your body is made of cells, and cells make more cells by dividing. Before a cell divides, it copies its DNA. Then the nucleus divides in four stages called mitosis, and the cell splits in two. The two new cells are identical to each other and to the first cell.

Chromosome
A coiled structure of DNA in the nucleus. It is easiest to see when a cell is dividing.

Chromatid
One of the two identical copies of a chromosome. The two copies are joined until anaphase.

Nucleus
The part of the cell that holds the DNA. It divides during mitosis.

Spindle fibers
Thin threads that pull the chromatids to opposite ends of the cell.

Cytokinesis
The step when the cytoplasm divides and the cell splits in two.

Daughter cell
One of the two new cells made when a cell divides.

Your turn. Write what you know.

Mitosis is

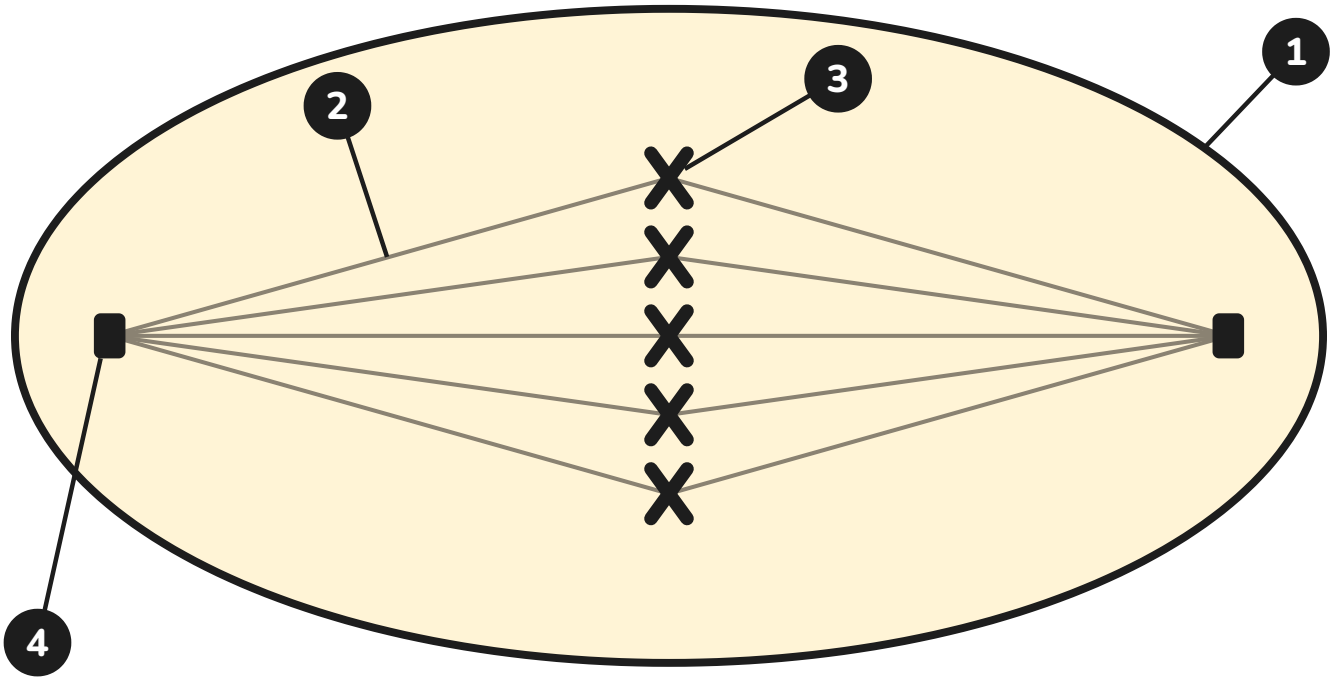
One question I still have about cells dividing

DIAGRAM

LABEL THE DIVIDING CELL

My name: _____ Date .....

Write the name of each numbered part.



A cell that is dividing (not drawn to scale)

cell membrane **spindle fiber** **chromosome** **chloroplast** **cell wall** **centriole**

1. _____ 2. _____

3. _____ 4. _____

A. Which stage of mitosis does this cell show?

_____

B. Describe what the chromosomes are doing in this cell.

WORDS FILL IN THE BLANKS

My name: _____ Date .....

Pick a word from the box for each blank.

telophase	**interphase**	**cytokinesis**	**prophase**	**chromosomes**	**osmosis**	**nucleus**
anaphase	**daughter cells**	**metaphase**	**meiosis**	**chromatids**		

Before a cell divides, it grows and copies its DNA. This part of the cell cycle is called (1) _____. In mitosis, the (2) _____ of the cell divides. In (3) _____, the chromosomes coil up and become easy to see. In (4) _____, the chromosomes line up in the middle of the cell. In (5) _____, the sister (6) _____ are pulled apart to opposite ends. In (7) _____, two new nuclei form. Then (8) _____ splits the cytoplasm in two. The cell has made two (9) _____, and each one has the same number of (10) _____ as the original cell.

Write the six steps of cell division in order, from first to last.

☐ → ☐ → ☐ → ☐ → ☐ → ☐

First Last

A. Pick one word you used in the paragraph. Write what it means in your own words.

STAGES

THE STAGES OF MITOSIS

My name: _____ Date .....

Fill in the table. Then name each stage.

Mitosis is the division of the nucleus. It has four stages, and the chromosomes do something different in each one. The first row is done for you.

Part A. Finish the table.

STAGE	WHAT THE CHROMOSOMES DO	WHAT ELSE HAPPENS
Prophase (worked example)	Chromosomes coil up and become visible	The nuclear envelope breaks down; spindle fibers form
Metaphase		
Anaphase		
Telophase		

Part B. Name the stage that each clue describes.

CLUE	WHICH STAGE? (PROPHASE, METAPHASE, ANAPHASE OR TELOPHASE)
The chromosomes are lined up across the middle	
Sister chromatids are moving to opposite ends	
Two new nuclei are forming	

Part C. Why does a cell copy its DNA before mitosis?

SORT CUT AND PASTE: SORT IT

My name: _____ Date .....

Cut out the pieces. Paste each one in the right box.

Prophase	Telophase

Cut on the dashed lines.

The nuclear envelope breaks down	Two new nuclei form	Chromosomes coil up and become visible	Spindle fibers begin to form
Chromosomes uncoil	A nuclear envelope forms around each set	Comes right after interphase	Comes right before the cell splits

1. Write one sentence that tells what happens in anaphase, the stage between these two.

TRACKER

MITOSIS TRACKER

STUDENT

TEACHER

UNIT DATES

PAGE	PAGE TYPE	ITEMS	RIGHT	DATE	NOTES
5	Label the Dividing Cell	4			
6	Fill In the Blanks	16			
7	The Stages of Mitosis	10			
8	Multiple Choice	8			
9	True or False? Fix It	8			
10	Read the Data, Draw the Graph	6			
11	Trace the Process	6			
12	Cut and Paste: Sort It	8			
13	Short Answers	5			
14	Explain It	3			

How to fill this in

Write how many items the student got right and the date. A written answer counts as one item when it makes every point in the key (pages 15 and 16). A blank means not tried yet, never wrong. There are 74 items on the 10 pages above; the reference page (4) is not scored. Filled example: page 21.

STANDARD OR UNIT GOAL (YOUR OWN WORDING)

EXAMPLE JORDAN'S TRACKER

Jordan T. is invented; nothing on this page describes a real student. The blank tracker is on page 17.

STUDENT	TEACHER	UNIT DATES
Jordan T. (an invented student)	**Ms. Reyes (invented)**	**October**

PAGE	PAGE TYPE	ITEMS	RIGHT	DATE	NOTES
5	Label the Dividing Cell	4	3	10/12	Mixed up two parts of the cell
6	Fill In the Blanks	16	14	10/13	Used a spare word twice
7	The Stages of Mitosis	10	10	10/14	–
8	Multiple Choice	8	7	10/15	Missed number 7
9	True or False? Fix It	8	8	10/16	–
10	Read the Data, Draw the Graph	6	–	–	–
11	Trace the Process	6	–	–	–
12	Cut and Paste: Sort It	8	7	10/19	One piece in the wrong box
13	Short Answers	5	–	–	–
14	Explain It	3	–	–	–

How to read it

Jordan T. has done **6 of 10** scored pages and got **49 of 54** items right. **2** pages were all right and **5** items were missed across 4 pages. Every number here comes from the table above.

The family note this tracker would produce

"This month Jordan finished 6 pages and got 49 of 54 items right. The next thing to practice is naming the parts of the cell and the stages prophase and telophase." — every number in it is a row of the table above.

What the table points to

4 pages carry a note and each one is short of full. Pages left blank (4 of them) are not tried yet, never wrong. The two writing pages, Short Answers and Explain It, are among them, so they are the next step.

THANK YOU

BEFORE YOU GO

THANK YOU FOR USING THIS RESOURCE

Built for the teacher whose students each need a different amount of support reading, writing and reasoning about science. If this helped, leaving feedback on TPT helps other teachers find it.

Everything inside, one more time

- **11 student pages** in 11 page types, **74 scored items**, every answer read from the same lists that draw the pages.
- **8 multiple-choice questions**, **8 true-or-false statements**, **8 cut-and-paste pieces** and **2 answer keys**.
- **1 tracker, 1 class grid, 1 team note, 1 family page, 1 filled example, 1 phrase bank** (15 starters), **1 binder cover** and divider tabs.

No real student anywhere in this file

The filled example on page 21 names "Jordan T.," an invented student used only to show how the tracker fills in. The cell counts on page 10 are invented data. No table, note or score anywhere in this resource describes a real child, and nothing here is a clinical judgment, an eligibility timeline, or a medical claim of any kind. Once you fill in a real student's name, the tracker, class grid and team note (pages 17, 18 and 19) do carry real information — keep completed pages secure the same way you would any other record.

Something missing or wrong?

Please use the **Ask a Question** tab on the product page first — every question is read, and a fix to the file is a free update you re-download from **My Purchases**.

WHAT'S NEXT FROM THIS STORE

More science and vocabulary for the same classroom, including lower-reading-level sets for students who need them.



Content Area Vocabulary: Science and Social Studies
Progress-monitoring probes for science and social studies words, grades 4-6.



Push and Pull Worksheets
A lower-reading-level science set: circle push or pull, sort and fill in, K-2.



Landforms and Bodies of Water Worksheets
A lower-reading-level earth science set: anchor chart, circle, odd word, cut and paste, K-2.

Click **Follow** on the store page and TPT will email you when new products go up.

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