

# Warm Up

What do you think you will be learning in the unit for Reproduction and DNA?

- ☐ Review the questions on the handout
- ☐ Watch the video
- ☐ Complete the each question completely

## Warm Up



What am I going to learn today

Today I am going to show what I know about Reproduction and DNA

# What am I going DO today?

## Today I am going to Read!

- ✓ Life Science Reading: Reproduction
  - ✓ You've been given 2 page reading on reproduction
  - ✓ Make a few notes about the "reading"
  - ✓ Answer the questions
  - ✓ Be prepare to share your answer on "post-it"

## Life Science Reading: Reproduction

- You've been given 2 page reading on reproduction
  - Make a few notes about the "reading"
  - Answer the questions
- Be prepare to share your answer on "post-it"

The worksheet is titled "Reproduction" in a central oval. It is divided into four quadrants by lines extending from the oval:

- Top Left:** "What kinds of cells does meiosis make?"
- Top Right:** "What is a gamete, and why does meiosis make them?"
- Bottom Right:** "Describe sexual reproduction (use context cues)?"
- Bottom Left:** "How do your meiosis, gametes, result in entirely new sets of DNA?"

At the bottom of the page, there is a question with lined space for an answer:

☐ Predict what would happen if a plant underwent meiosis? How would those new cells be different or the same as the parent?

There are four horizontal lines for writing the answer.

What kinds of cells does meiosis make?

What is a gamete, and why does meiosis make them?



How do your meiosis, gametes, result in entirely new sets of DNA?



Reproduction



Describe sexual reproduction (use context cues)?



*Predict* what would happen if a plant underwent meiosis? How would those new cells be different or the same as the parent?

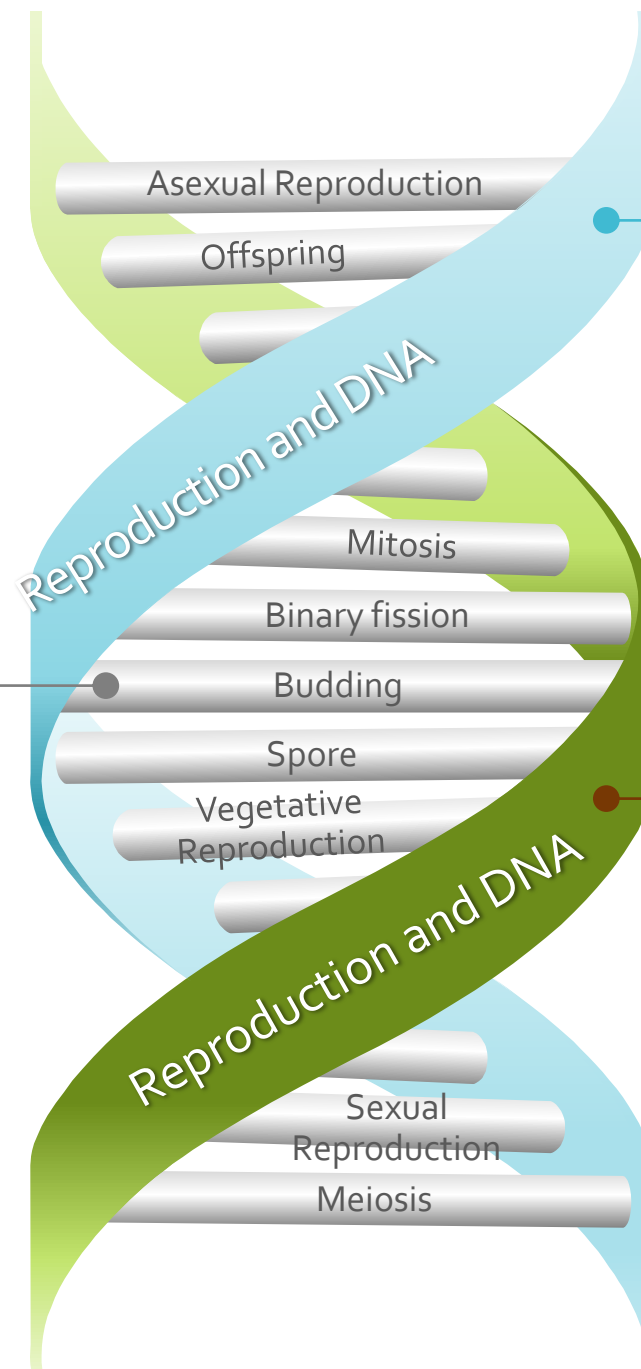
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**Asexual Reproduction**

Relate to Mitosis

**Sexual Reproduction**

Relate to Meiosis

**Unit Vocabulary**

Study for upcoming Quiz

# What is Asexual Reproduction?

- One organism produces one or more new organism that is identical to itself.



# The genetic makeup will be **IDENTICAL** to the Parent

Describe the genetic makeup of offspring from asexual reproduction

## Asexual Reproduction

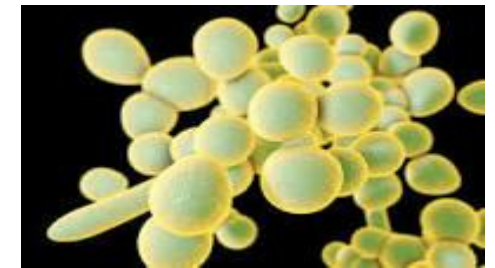
- One parent
- Offspring are identical to the parents.



Can you List 5 organism that reproduce asexually?

### MY 5 Organisms

- Dandelions
- Bacteria
- Plants
- Yeast (fungi)
- Mushrooms

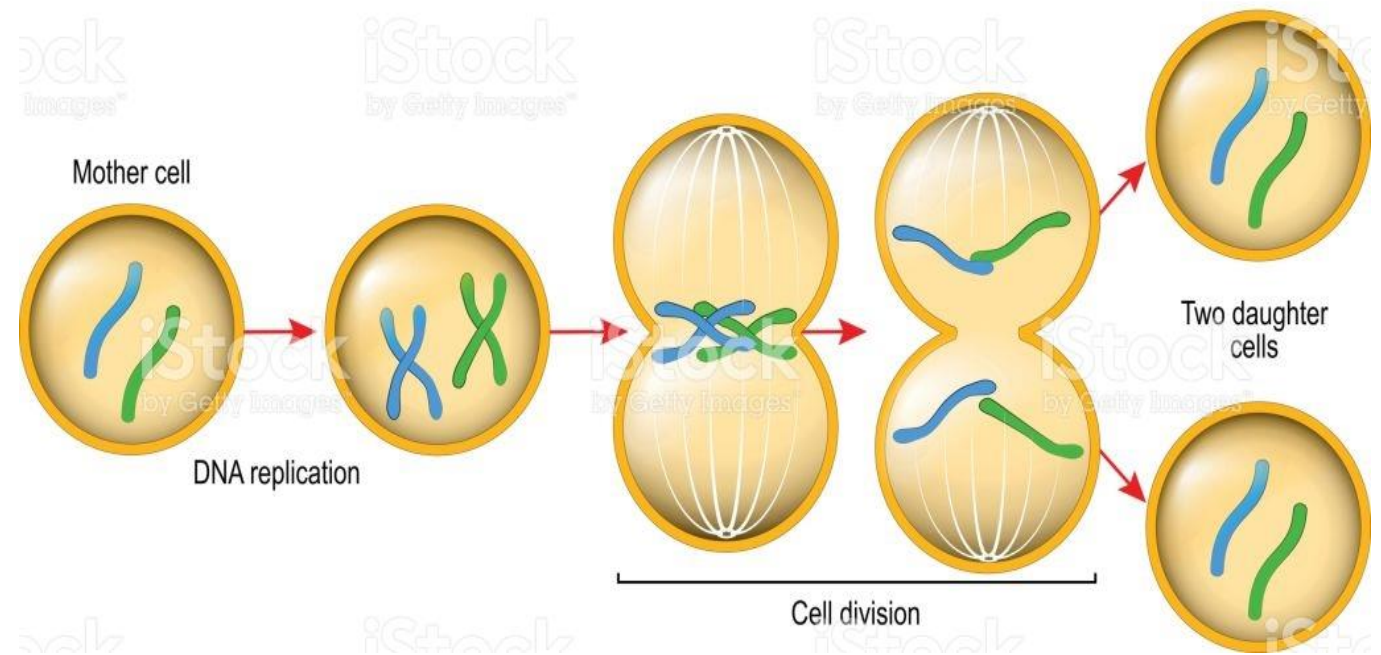


How do organisms reproduce asexually?

*Hint page 187*

Mitosis- a type of cells division where offspring are identical to parent

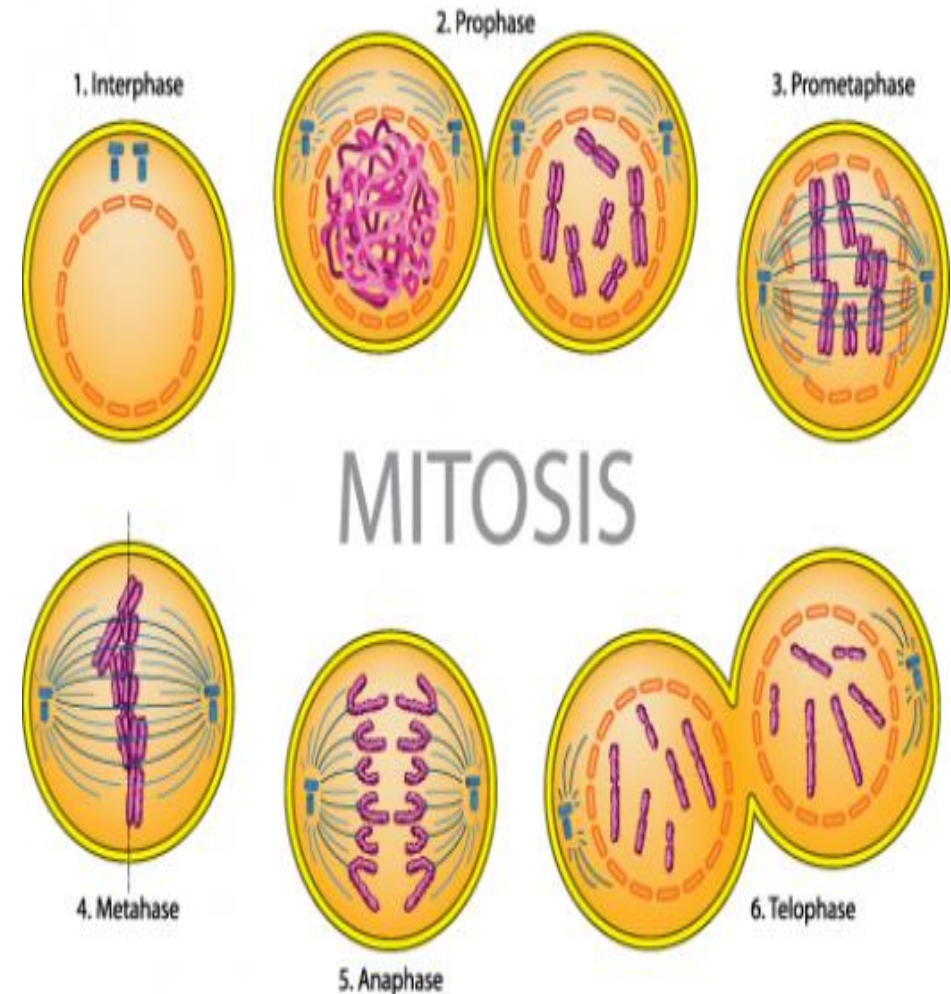
## MITOSIS



# Asexual Reproduction

- What is mitosis?

- a type of cells division where offspring are identical to parent



# Asexual Reproduction?

- What happens in budding?
- An organism develops tiny bud on its body
- “Bud” forms a new full sized organism





# What is Asexual Reproduction?

- How would you describe a spore? A specialized Cell that can survive harsh conditions.
- Carried by the wind....
- All living things adapt/evolve

# Asexual Reproduction?

- Which organisms have them (spores)?
- FUNGUS
- Mushrooms

# Asexual Reproduction?

- What is vegetative reproduction?
- Plants are able to reproduce and make new organism (runners or tubers)





# What are 4 advantages of asexual reproduction?

Hint Page 190

Organism reproduce quickly

Offspring are identical, gets the favorable traits.

Only one parent need (no partner needed)

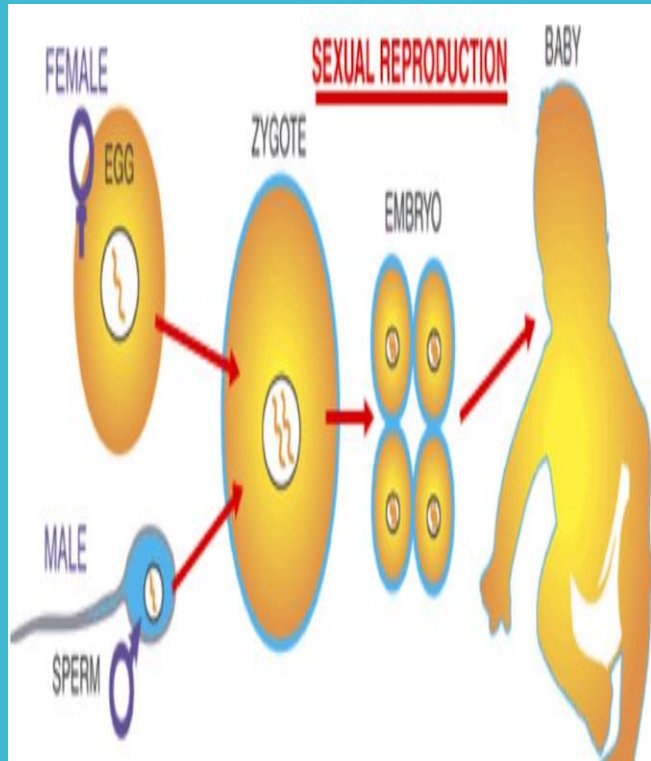
All offspring can reproduce NOT Just FEMALES!!!

Can multicellular organisms  
reproduce asexually?

Most multicellular organisms  
reproduce using?

Hint: page 188

# Most Multicellular Organism Reproduce Using?



Sexual Reproduction-Parents contribute a sex cell to form a New Organism

# Sexual Reproduction

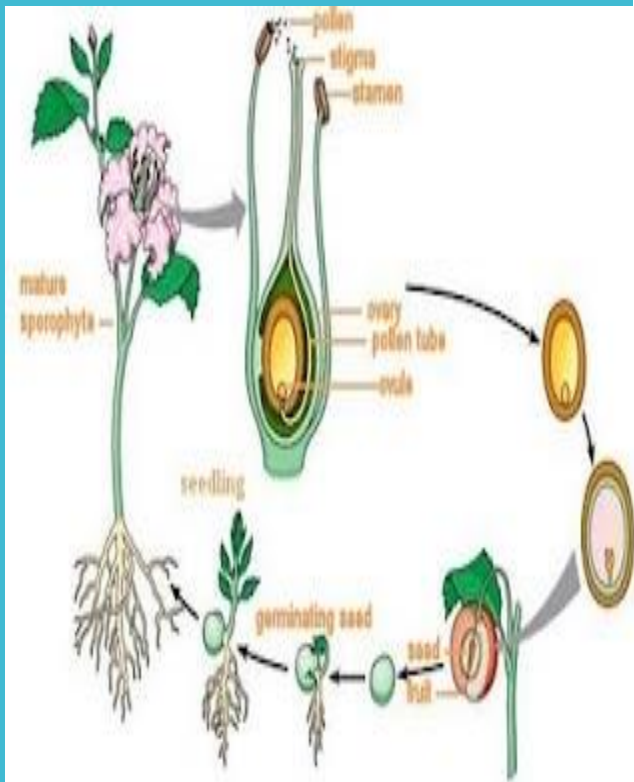
Why are off spring Not exactly like the parent?

Half the genes (DNA) come from one parent while the other half come from the other

# Fertilization

One parent is usually female  
and the other parent is  
usually male

**Fertilization** is when the two  
sex cells are joined together.



# Meiosis

Meiosis is the cell division for making sex cells or GAMETES

# Offspring from asexual vs sexual reproduction



Asexual

One parent  
identical

Sexual

Two parent  
different

Can some organisms reproduce  
using both asexual and sexual  
reproduction

Yes!

Plants can reproduce **asexually**  
using “vegetative reproduction”  
(tubers and runner

Plants can reproduce **sexually**

Plants (pollen-sperm)

Plants (ovule- egg)



# Genetic Variation

Many different combinations of  
genes

# What am I going DO today?

Today I am going to:

- ✓ Complete my Pre-Test
  - ✓ Number your paper 1-33
  - ✓ Enter in iRespond
- ✓ Start my Unit Vocabulary (KIM Chart)
  - ✓ Use Pages 186-193 to get definitions