Lifeline

Outcomes:

2-2-10: Compare the length of time from birth to adulthood for humans and other animals.

2.SS.1 (Mathematics): Relate the number of days to a week and number of months to a year in a problem-solving context.

Materials:

- scissors and glue
- tape or sticky putty
- wall, chalkboard, or bulletin board
- writing utensils
- contents of this package

Teacher Instructions:

Read through the package before printing. Then follow the instructions provided to assemble the lifeline and animal cards. The Activity Instructions are on page 2.

Lifeline

1. Print pages 8 to 18. These pages will be glued together to form one continuous "lifeline" that can be posted on a wall or chalkboard in the classroom.
2. These pages should remain in numerical order. Begin with page 8. Apply glue on the designated area on the page.
3. Take page 9 and place it on top of page 8, covering only the glued area. Continue for pages 10 to 18.

Animal Cards

1. Print pages 3 to 7. Each page contains 3 animal cards, each with one pointed end. These cards will later be placed along the lifeline according to the amount of time each animal takes to mature into adulthood.
2. Cut out the cards by cutting along the solid black lines. These cards can be laminated to increase durability.

Handouts: "How do we grow?" (Part 1 & 2)

Each student will receive one copy of each part. Answer keys are also provided.

Lifeline: Activity Instructions

This activity can be used as either a review or as an introduction to the life processes of various animals. Teachers intending this activity to be a review should ensure that children are familiar with the background information provided on page 23. Teachers intending this activity to be an introduction should be aware that children will be unfamiliar with the background information and will be making predictions rather than recalling the information they have already learned.

1. Using tape or sticky putty, post the assembled lifeline along a wall or chalkboard.

2. Hand out Part 1 of the "How do we grow?" worksheets. Explain to students how to complete the worksheet. Students may work individually or in small groups. *Note: if this is an introductory lesson, students will be predicting the answers. If it is a review, students will be using what they have already learned to complete this sheet.*

3. Once students have completed Part 1, go over the answers as a class using the lifeline on the wall or chalkboard. If students completed Part 1 in groups, give one animal card to each group and have them place their card along the lifeline according to their group's answer. If they worked individually, place students into groups of 2-3 and give each group one animal card. They may then discuss and agree upon an answer and place the card accordingly on the lifeline using sticky putty. *As an alternative, teachers can create a lifeline made of string and students can use clothes pins to hang their cards on it.*

4. Once students have finished placing their cards on the lifeline, go over each card, discussing why students chose to put it there, and moving it to the correct spot on the lifeline if necessary. Make sure to explain how or why their response is incorrect.

5. Now hand out Part 2 of "How do we grow?" Students may work on this individually or in small groups. Both Part 1 and Part 2 may be collected once completed for assessment.

Adaptations/Modifications:

To provide scaffolding for students on Part 1 of the "How do we grow?" worksheet, teachers may circle the correct time unit (weeks, months, years) for each animal so that students only have to fill in the blank with the appropriate number. Alternatively, teachers may provide the correct numbers and require students to circle the correct time unit.

Teacher Background Information

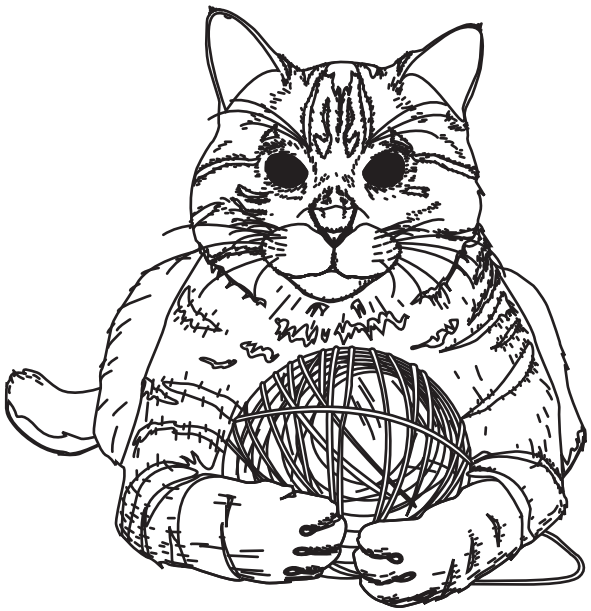
The chart below lists the animals from this activity, the amount of time it takes for each species to reach adulthood, and their average life spans.

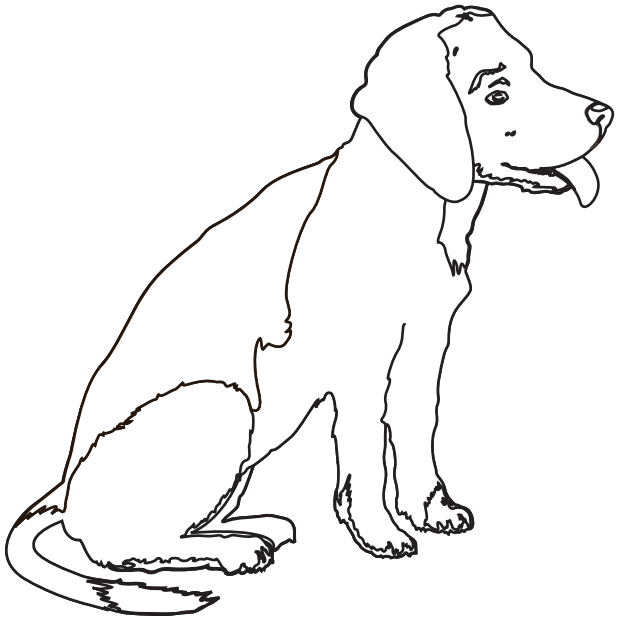
Species	Time from birth to adulthood	Average life span
mosquito	1-2 weeks	4-8 weeks
cat	6-10 months	15-20 years
dog	6-12 months	14-15 years
squirrel	8-10 months	3-4 years
fox	~10-12 months	10-15 years
mallard	~1 year	20 years
deer	1-2 years	6-7 years
wolf	2-3 years	6-9 years
beaver	3 years	15 years
bison	3 years	18-22 years
walleye	3-4 years	7-10 years
polar bear	3-4 years	30 years
catfish	3-6 years	15-20 years
humans	~18 years	77-81 years
sturgeon	20-25 years	50-80 years

Note: the symbol "~" represents the word "approximately"

mosquito

cat



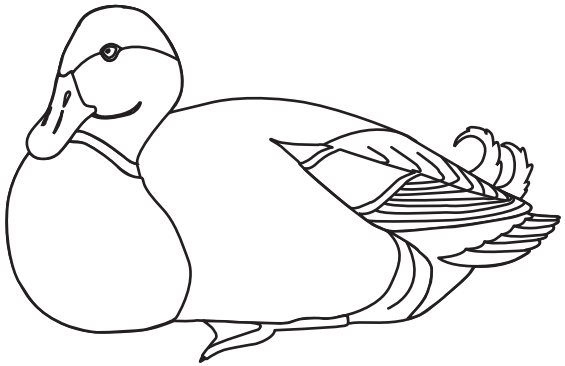


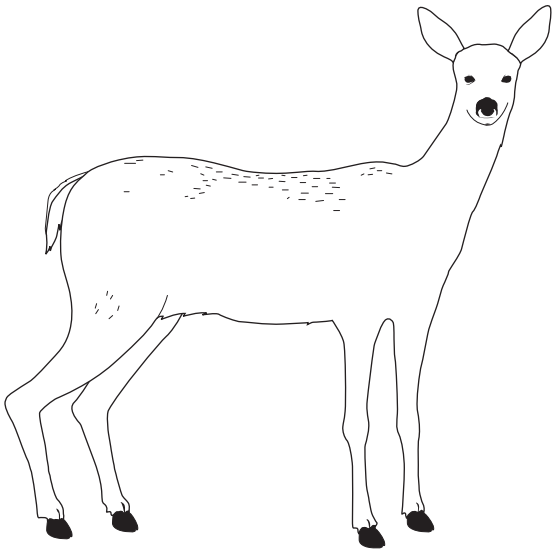
dog

squirrel

fox

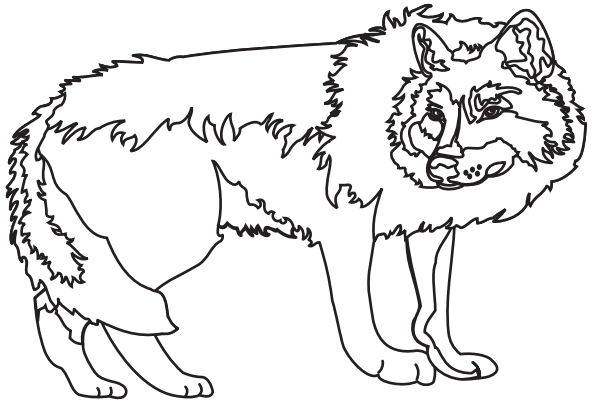
mallard





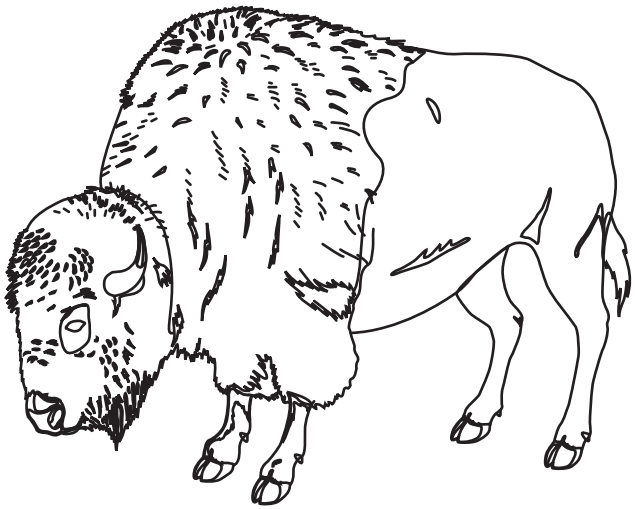
deer

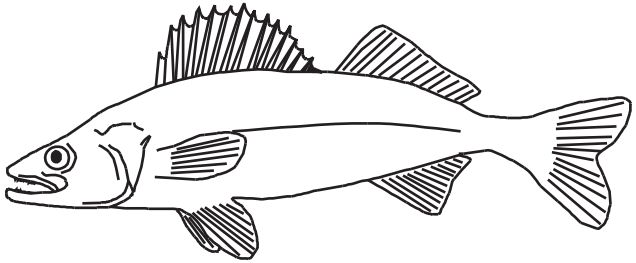
wolf



beaver

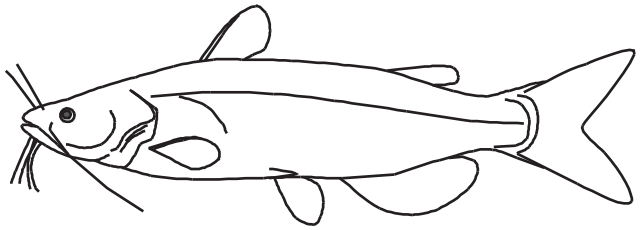
bison





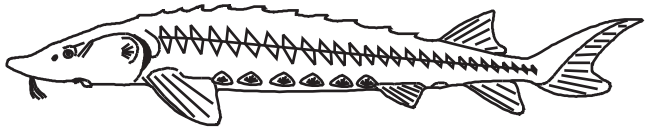
walleye

polar bear

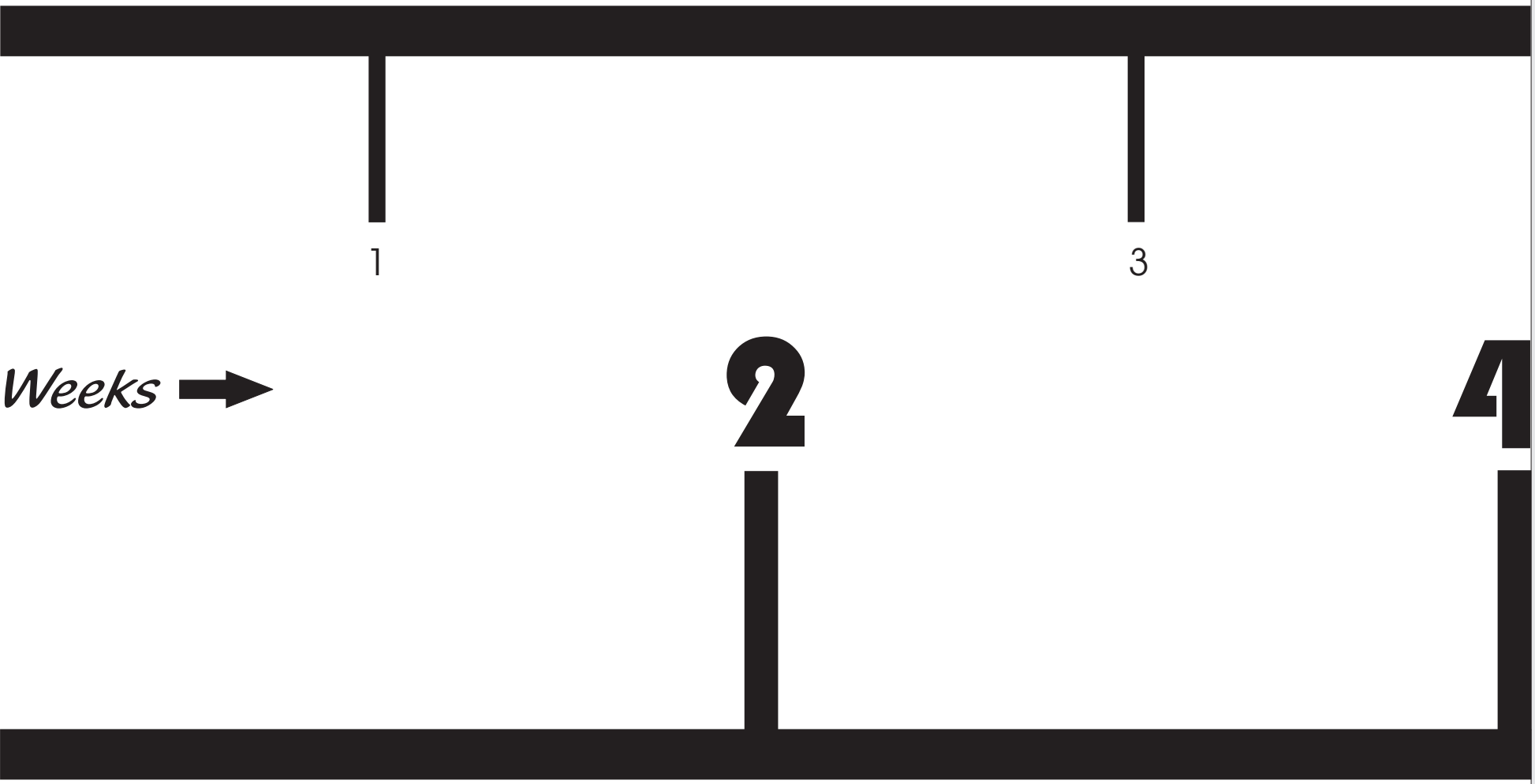


catfish

humans



sturgeon



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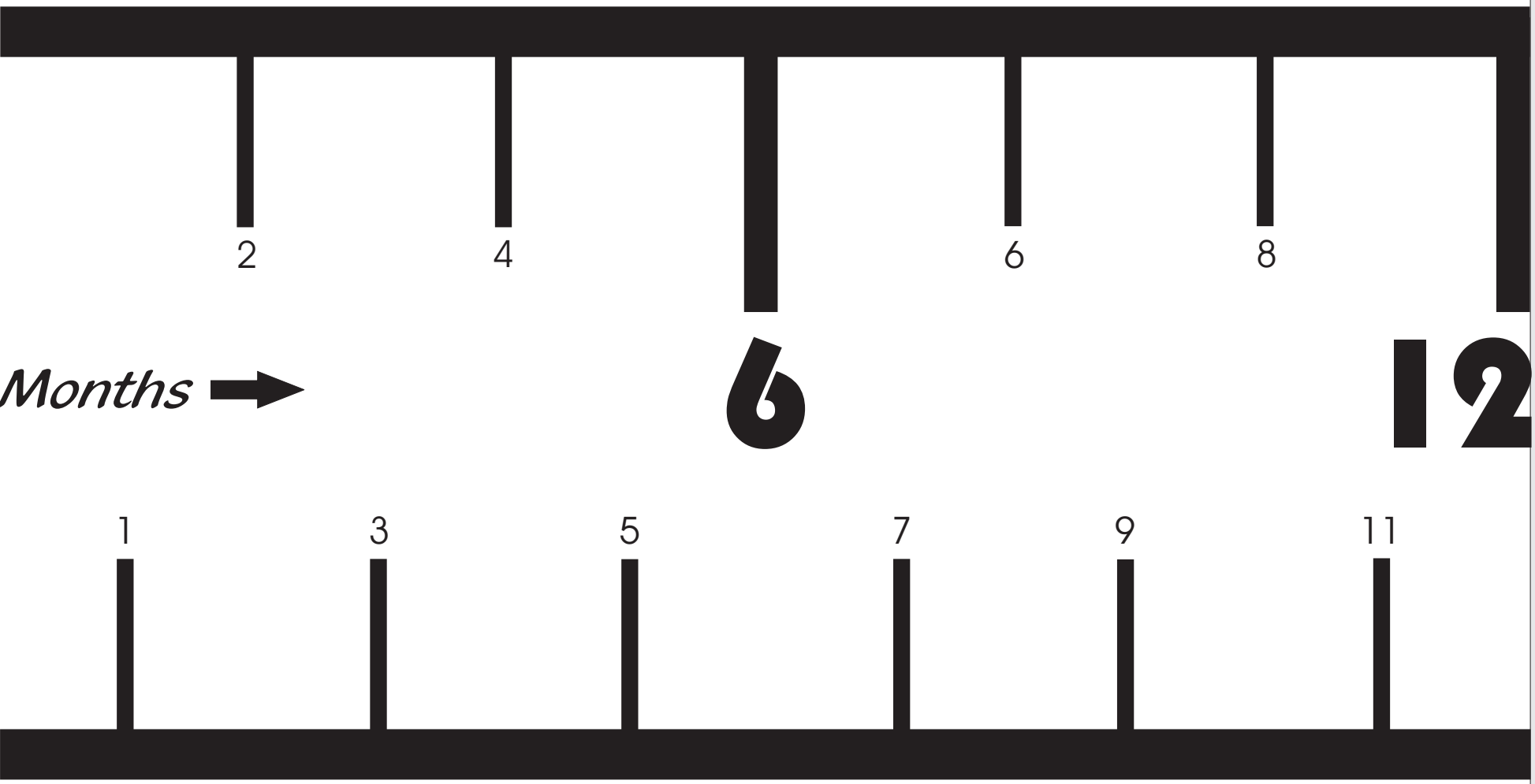

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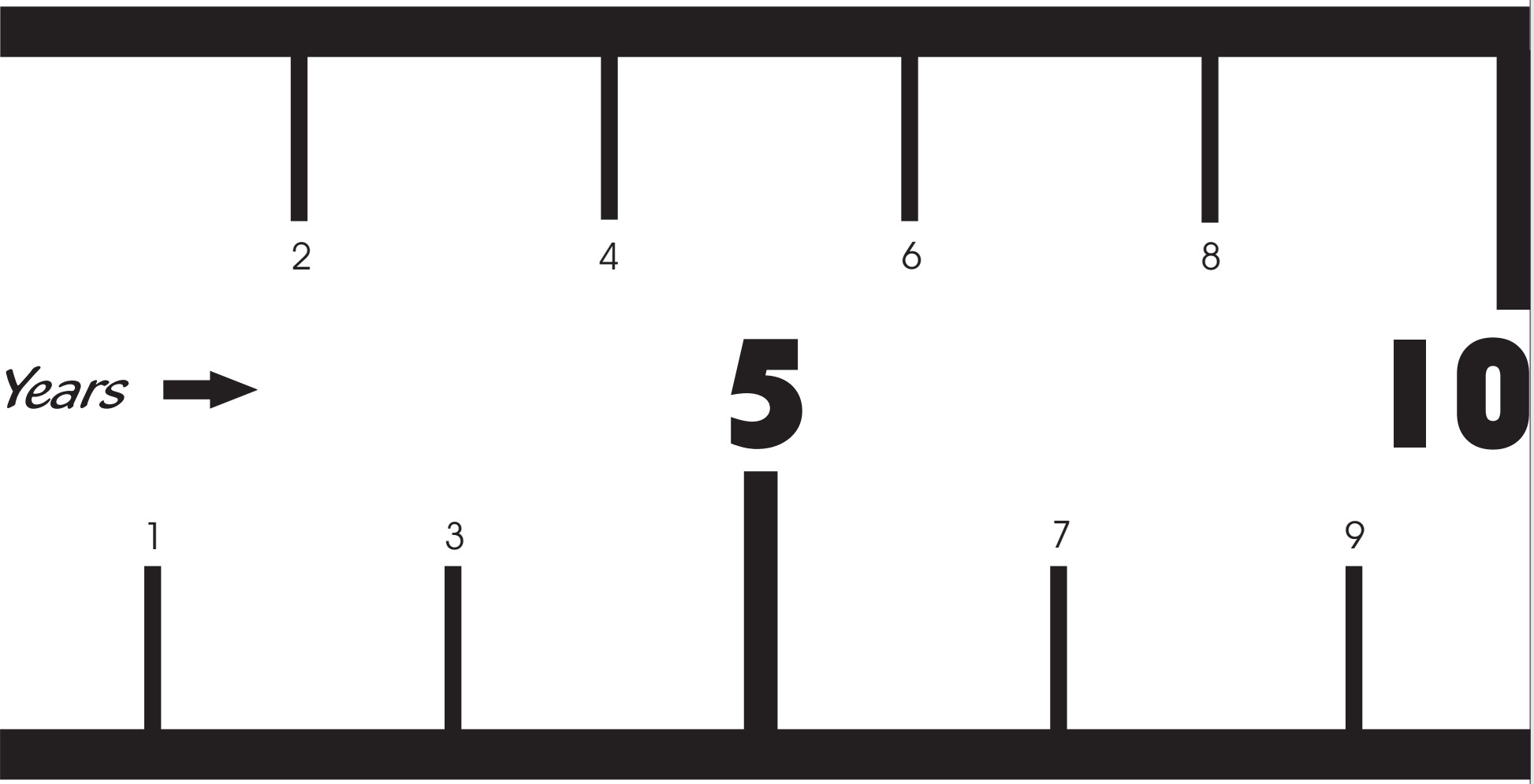

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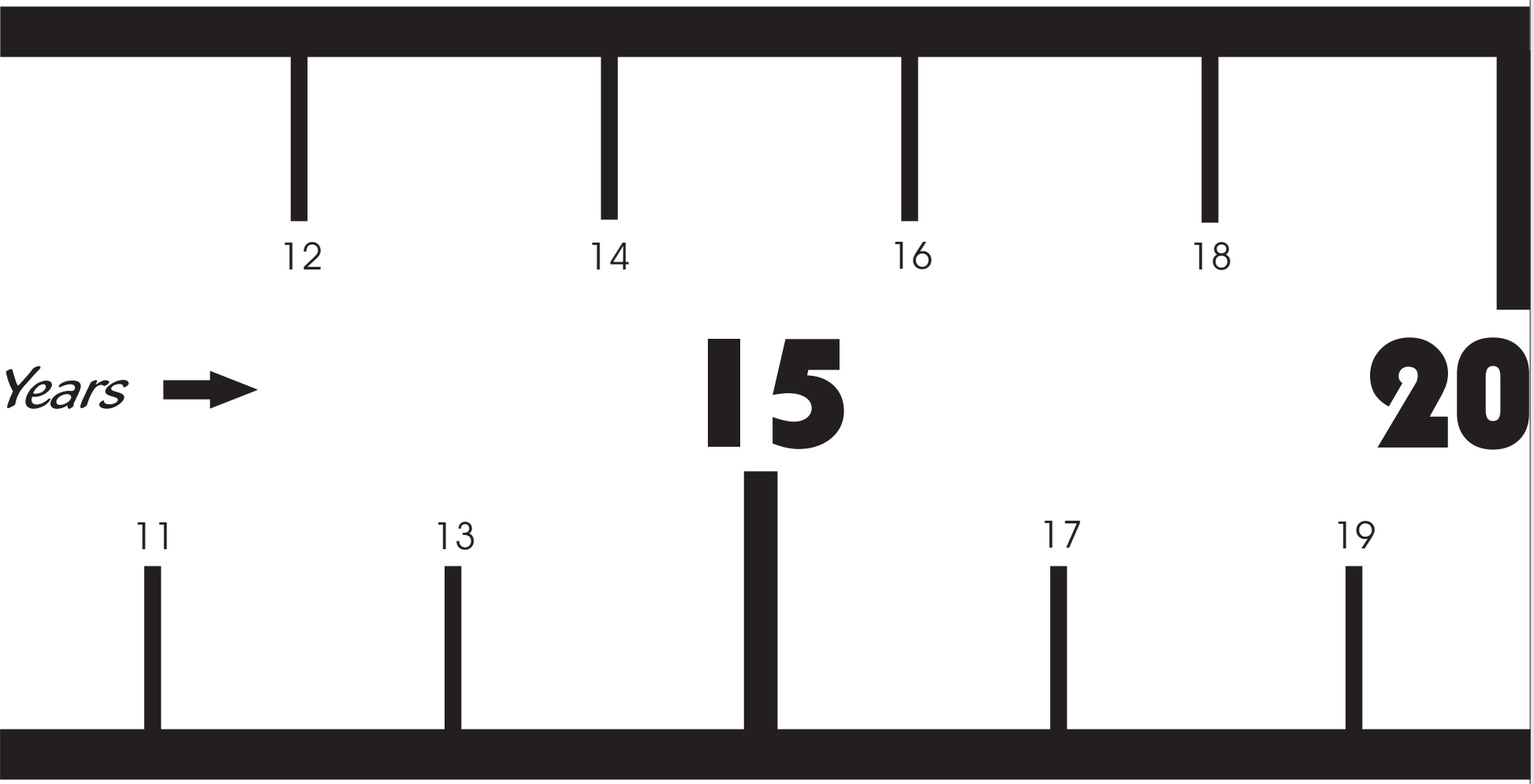

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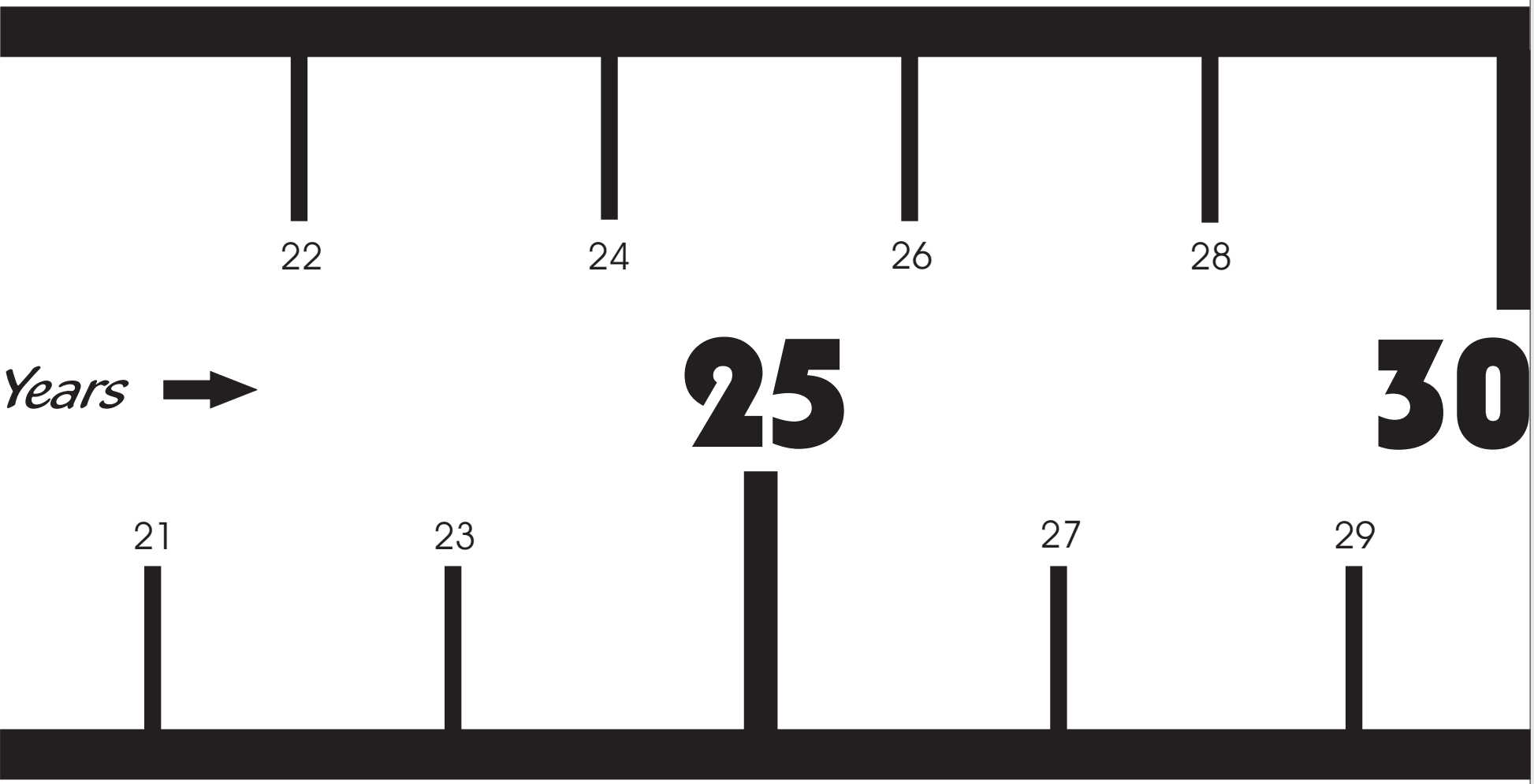

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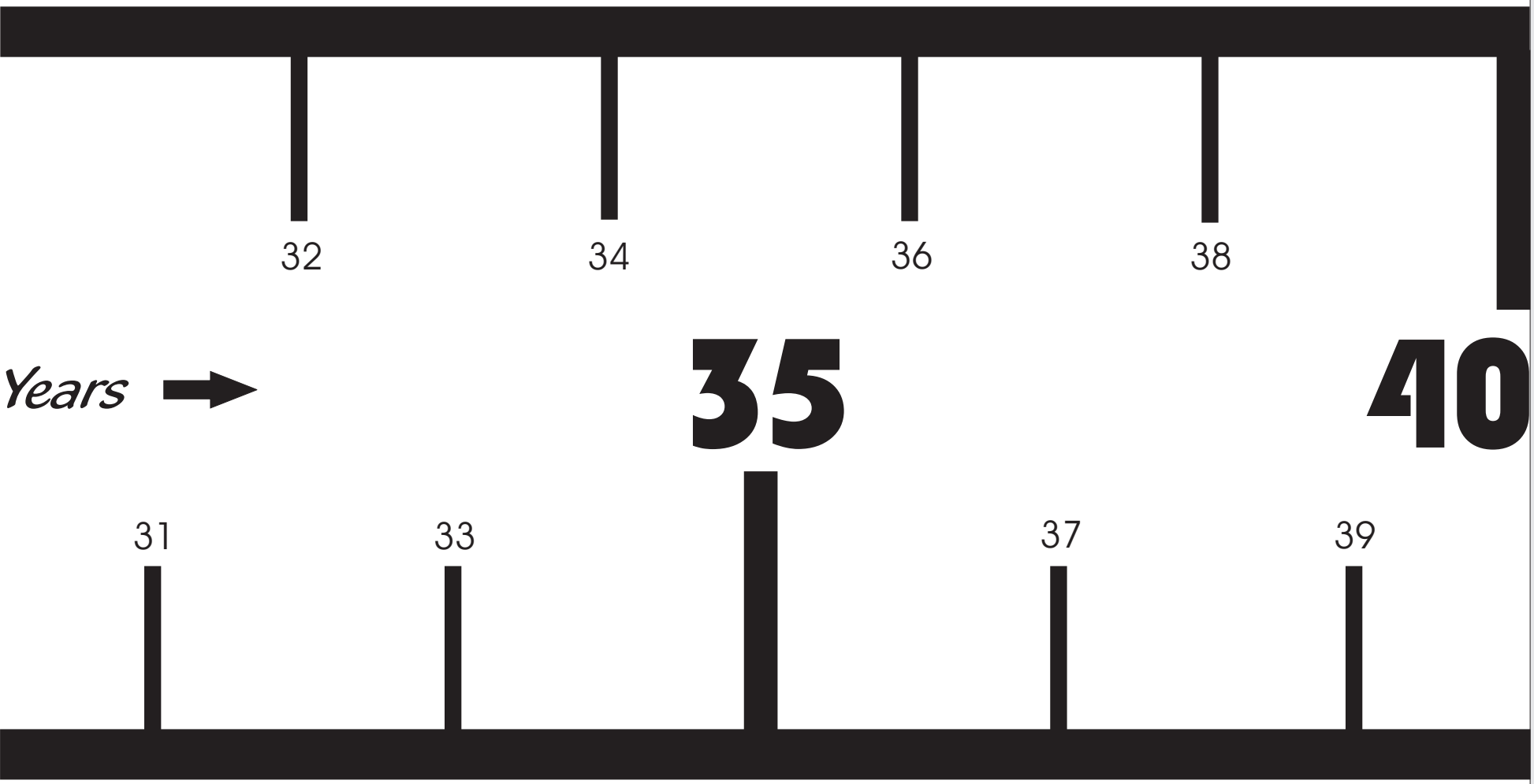

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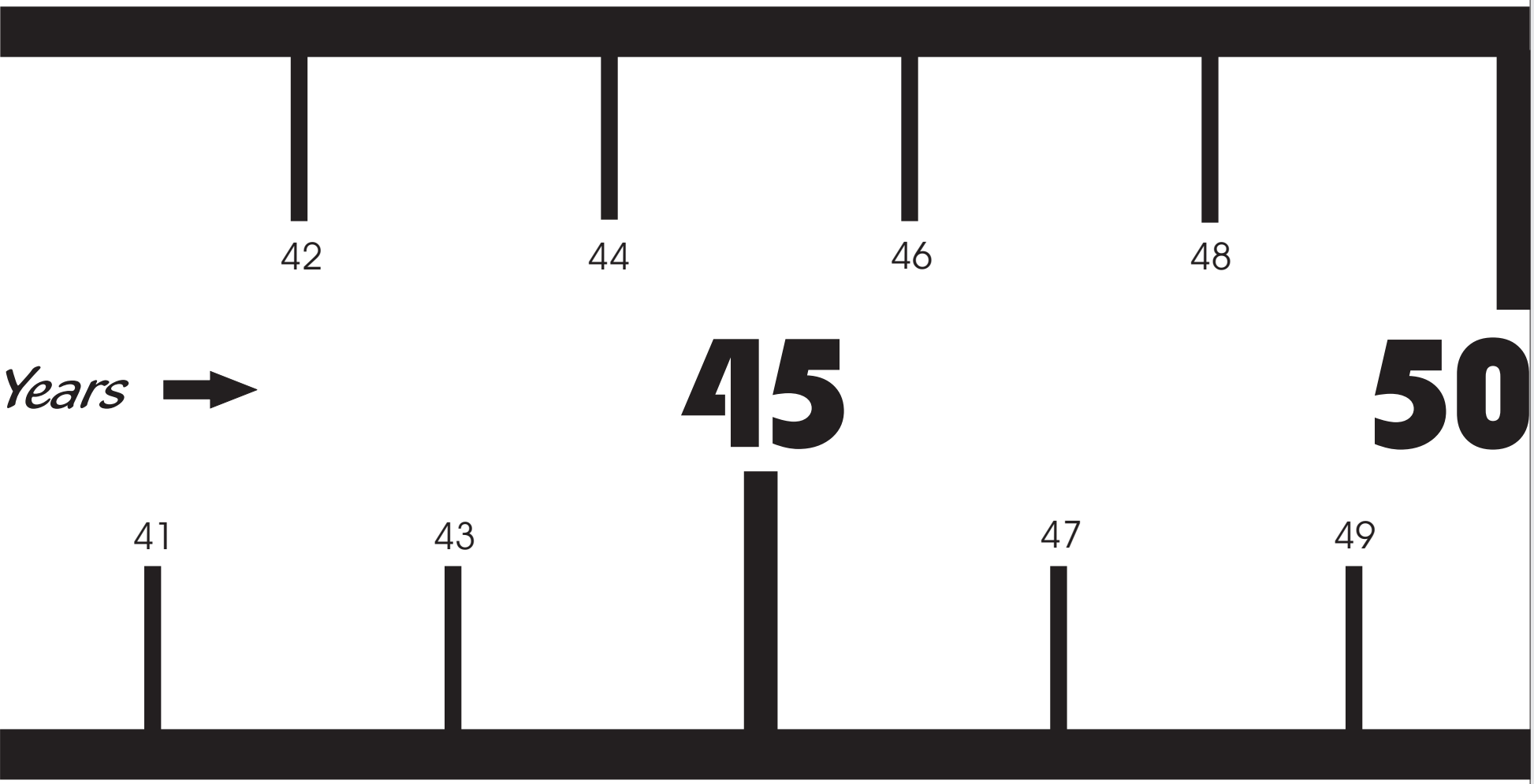

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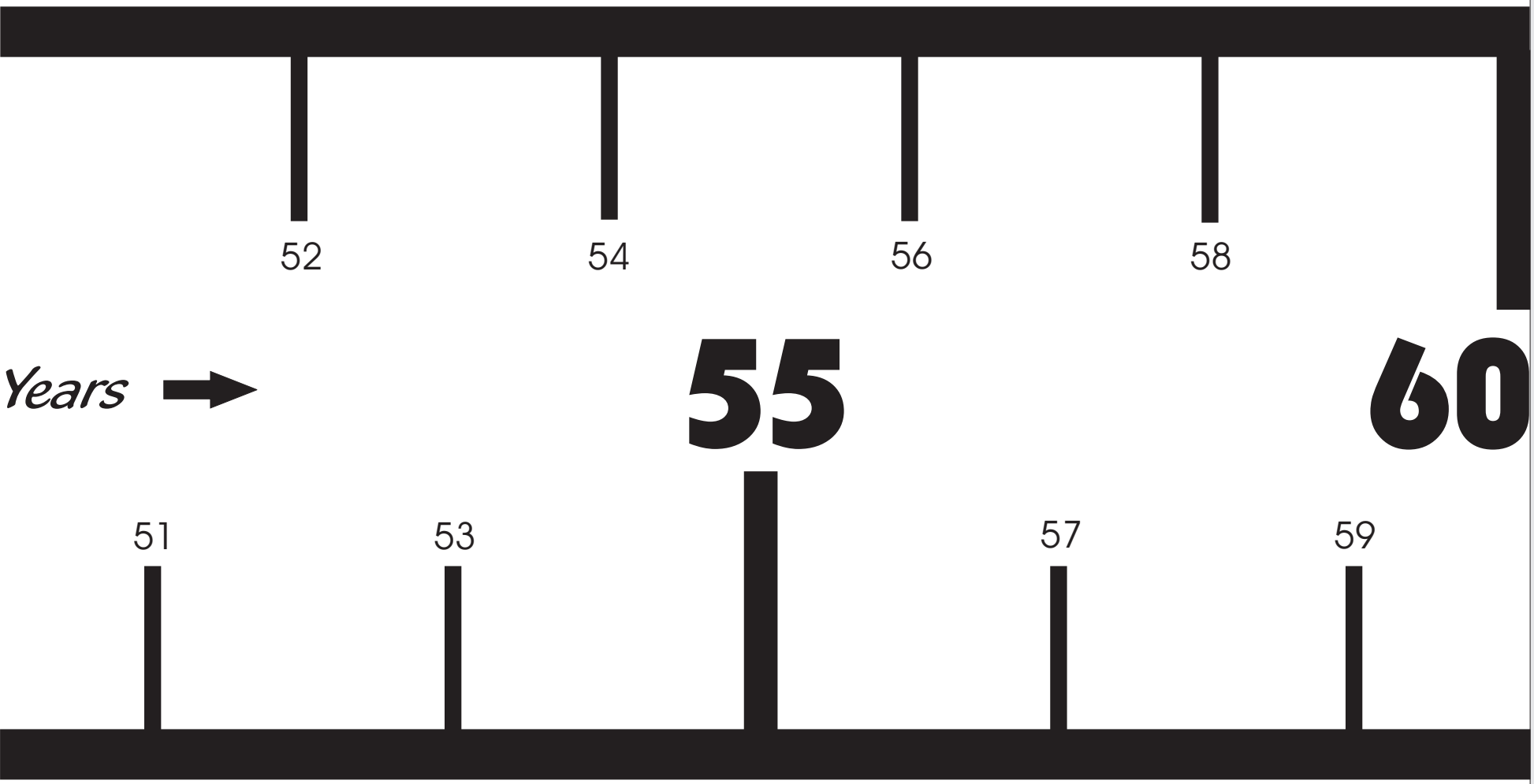

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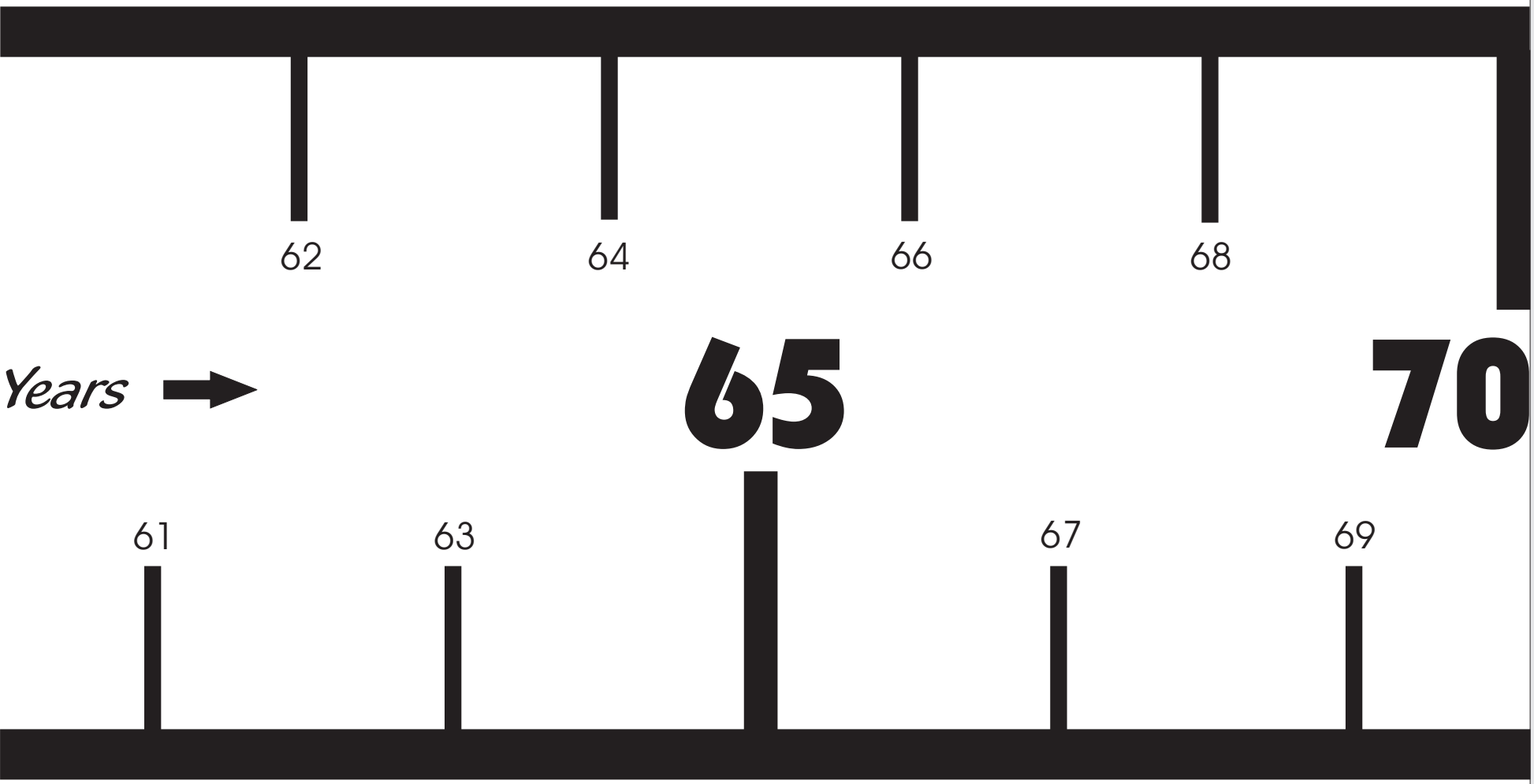

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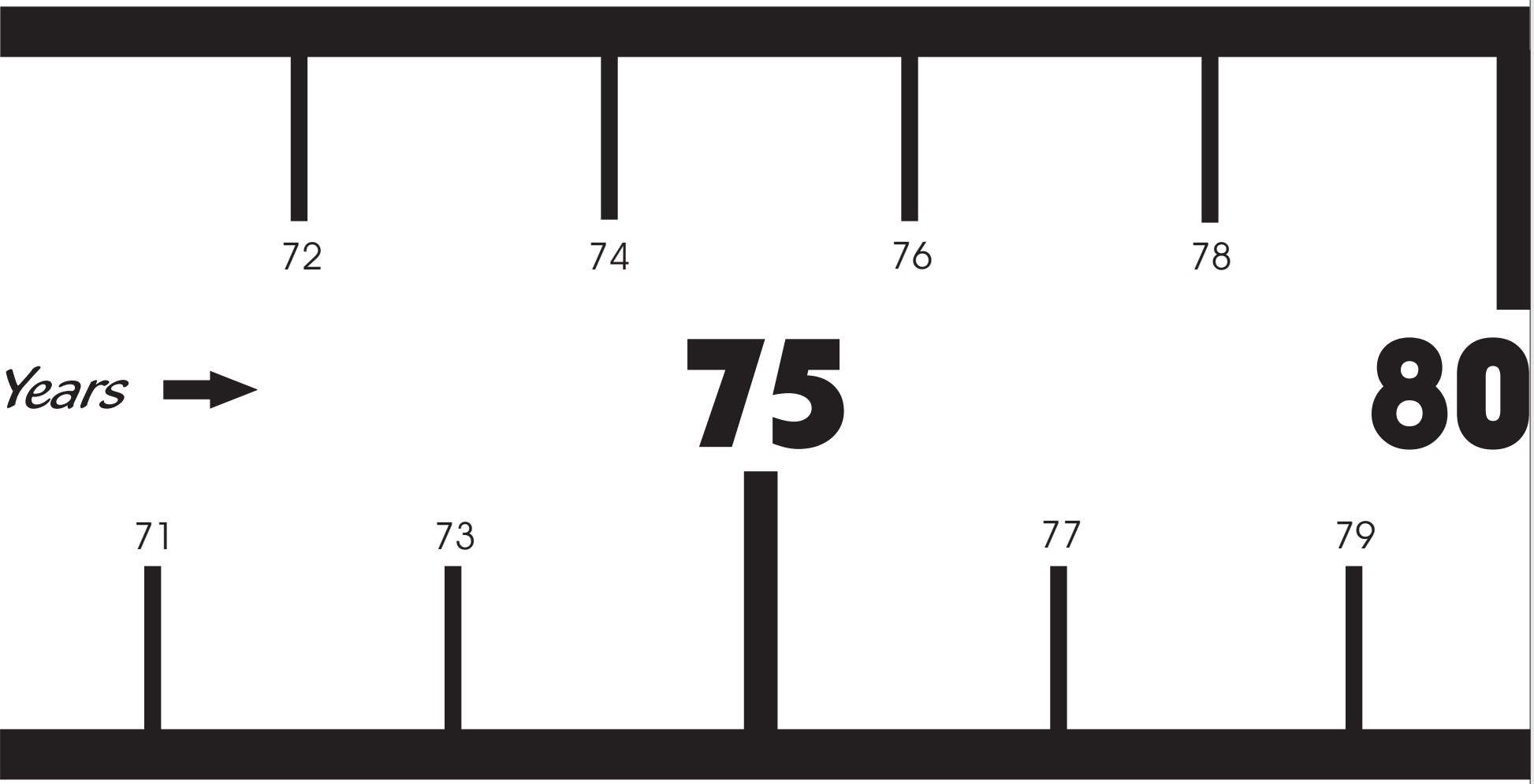

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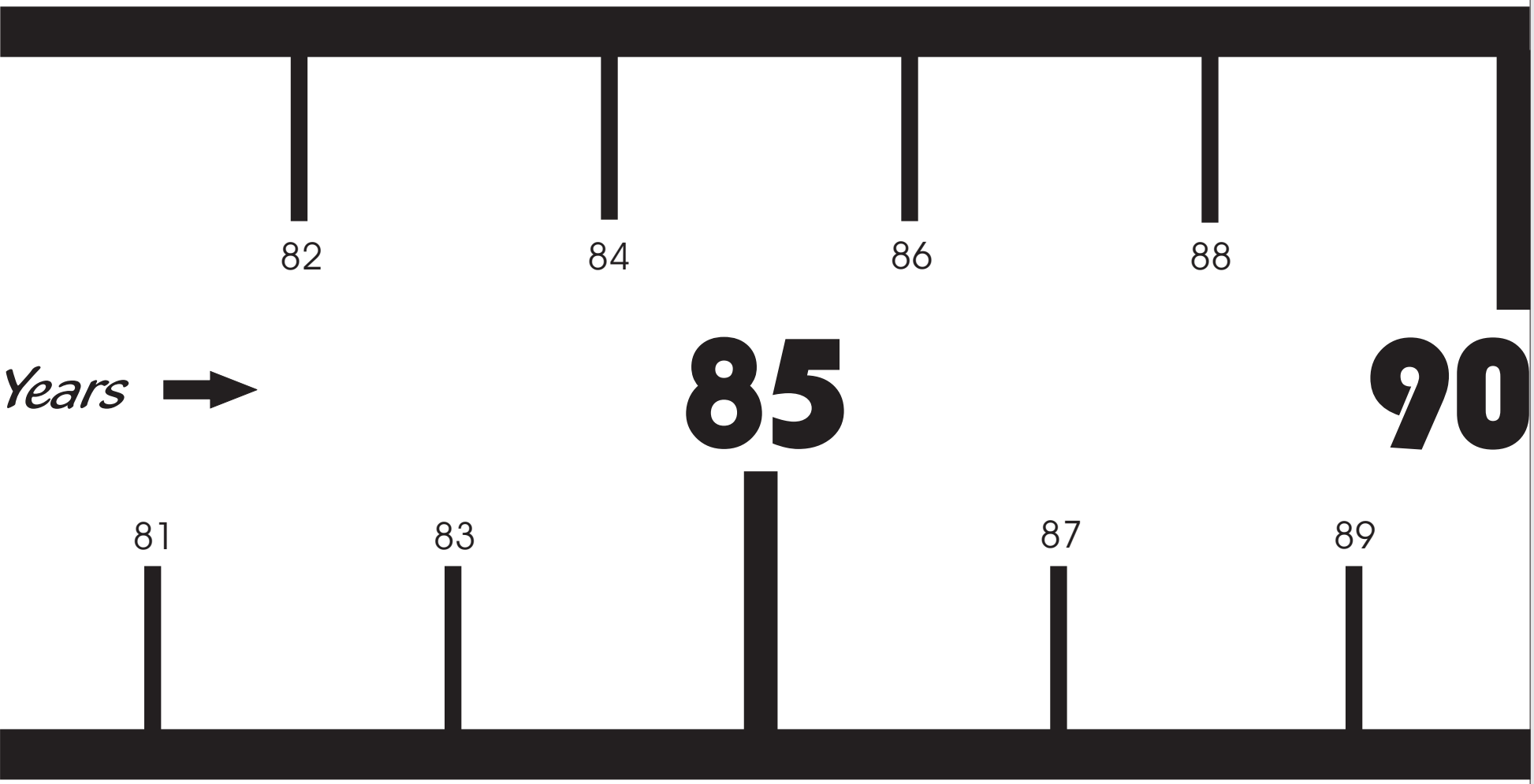

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Name: _____

How do we grow?

Part 1

How long do you think it takes for each of these animals to grow into adults? Write down a number in the space and then circle *weeks*, *months*, or *years*. The first one is done for you.

beaver

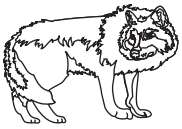
3 **weeks months years**

sturgeon

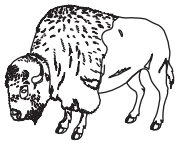
_____ **weeks months years**

mallard

_____ **weeks months years**


wolf

_____ **weeks months years**


bison

_____ **weeks months years**

cat

_____ **weeks months years**

mosquito

_____ **weeks months years**

channel catfish

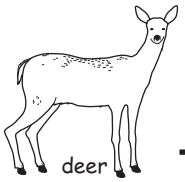
_____ **weeks months years**

dog

_____ **weeks months years**

squirrel

_____ **weeks months years**


deer

_____ **weeks months years**

walleye

_____ **weeks months years**

fox

_____ **weeks months years**

polar bear

_____ **weeks months years**

humans

_____ **weeks months years**

Name: _____

How do we grow?

Part 2

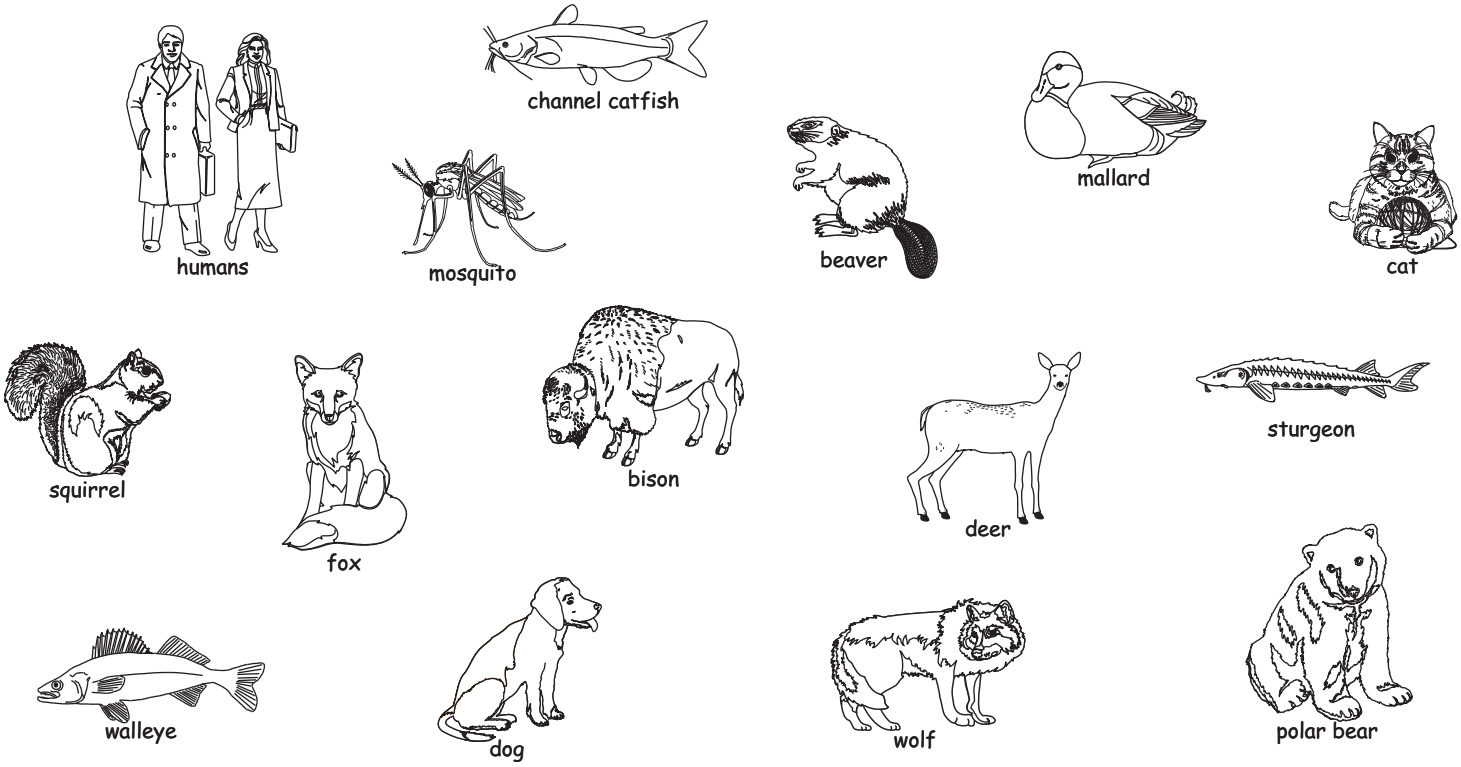
How many animals did you guess correctly?

_____ ✓ _____ ✗

_____ grow the fastest.

_____ grow the slowest.

Circle the animals that take longer than **3 years** to grow into adults.



How do we grow?

Part 1

Answer Key

How long do you think it takes for each of these animals to grow into adults? Write down a number in the space and then circle *weeks*, *months*, or *years*. The first one is done for you.

beaver

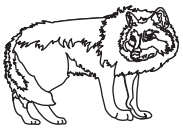
3 weeks months **(years)**

sturgeon

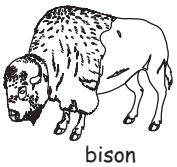
20-25 weeks months **(years)**

mallard

1 weeks months **(years)**


wolf

2-3 weeks months **(years)**


bison

3 weeks months **(years)**

cat

6-10 weeks **(months)** years

mosquito

1-2 **(weeks)** months years

channel catfish

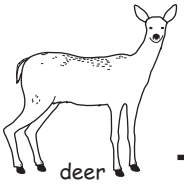
3-6 weeks months **(years)**

dog

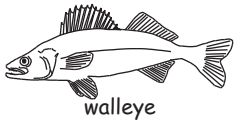
6-12 weeks **(months)** years

squirrel

8-10 weeks **(months)** years


deer

1-2 weeks months **(years)**


walleye

3-4 weeks months **(years)**

fox

10-12 weeks **(months)** years

polar bear

3-4 weeks months **(years)**

humans

18-21 weeks months **(years)**

***Note:** students' predictons should be considered correct if they are within the specified ranges for animals that do not have only one correct answer.*

How do we grow?

Part 2

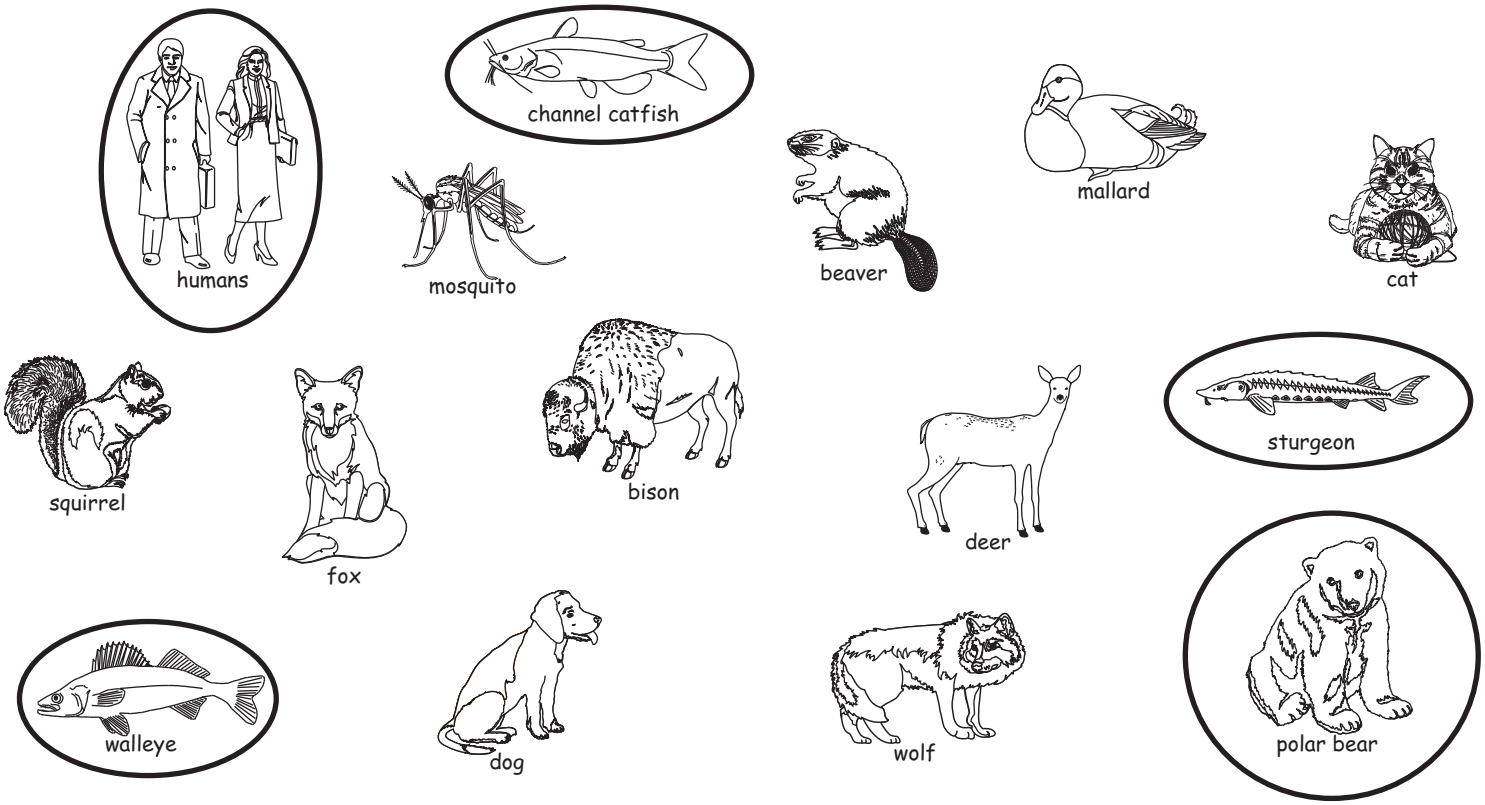
Answer Key

How many animals did you guess correctly?

I got _____ ✓ I got _____ ✗

Answers will vary.

Mosquitoes grow the fastest.

Sturgeon grow the slowest.

Circle the animals that take **longer** than **3 years** to grow into adults.