

Percent of A Number Commands

Prior Knowledge:

- Child should have prior knowledge of the following before introducing this work:
 - Fractions and Decimals
 - Basic knowledge of what is percent is (a fractional part of a number)

Materials:

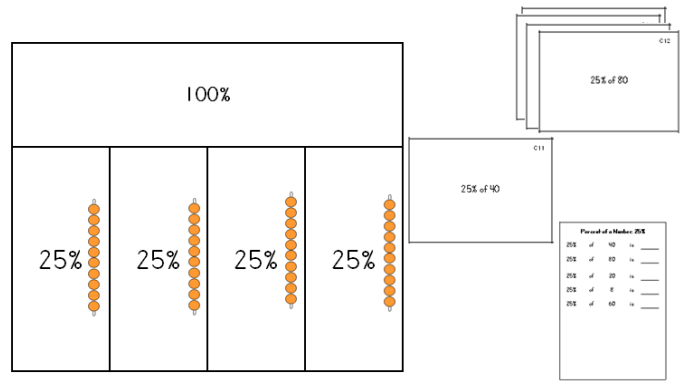
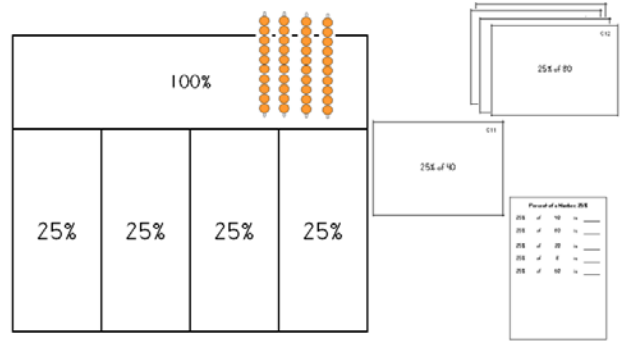
- Percent of a Number Commands – download available at www.montessoriforlearning.com
- Beads (10 bars and unit beads) – at least ten 10 bars and 90 unit beads.
(printable beads are available at www.montessoriforlearning.com) – real golden beads are recommended if available.

Instructions:

1. Invite a child to the lesson after they have the prior knowledge as listed above.
2. Model the lesson for the child. Show enthusiasm for the work. Many times a child's motivation for the work (whether it is boring or interesting) depends upon how it was modeled for them by the adult.

NOTE: although Control cards with answers are available. It is suggested that you record the correct answers to the problems on the back of the command card before laminating for easy reference for the child.

3. Set the Percent of A Number Card and command cards on the workspace. The Percent of a Number Card (large cards) should sit in the middle of the workspace and command cards in a pile over to the right (or child's dominant side) of the workspace. Make sure the sets are divided where the command cards are grouped with the correct Number Card (i.e. the 25% command cards are grouped with the 25% large number card) --- or that the child is aware of how to separate the cards so that he/she is using the correct Large percent card with the correct command cards.
4. Set the golden beads to the side of the workspace.
5. The child chooses a command card (in this example, the child chose 25% of 40.
6. Model aloud "25% of 40... so I need to take 40 beads and place it on my workspace."
7. The child will place the amount of golden beads as displayed on the card (i.e. 40 beads) in the top row of the card as shown below.
8. After the golden beads are placed on the workspace, re-read the card "25% of 40...this is what 100% of 40 looks like (40) I will divide 40 into equal groups so that I can see what 25% of 40 looks like...."
9. After dividing the amount, model thinking aloud..."hmmm.... 100% of 40 was 40.... but when I divide 40 into these equal groups, I see 25% of 40 is 10."
10. Check control card (or back of card if you chose to record answer on back of card) to check accuracy.



10. For beginning learners, you do not have to use the recording sheets. For more experienced learners, show them how to record their answers. (check control card or back of command cards-if you recorded the correct answers on the command cards to confirm accuracy)

C1 50% of 100	C2 50% of 10
C3 50% of 80	C4 50% of 50
C5 50% of 20	C6 50% of 60
C7 20% of 100	C8 20% of 10

C9 20% of 50	C10 25% of 100
C11 25% of 40	C12 25% of 80
C13 25% of 20	C14 25% of 8
C15 25% of 60	C16 10% of 100

C17 10% of 70	C18 10% of 50
C19 10% of 40	C20 10% of 10
C21 10% of 30	C22 10% of 90
C23 10% of 20	C24 10% of 60



A large rectangle is divided into three sections. The top section is a horizontal bar representing 100%. The bottom section is divided into two equal vertical halves, each representing 50%.

100%

50%

50%

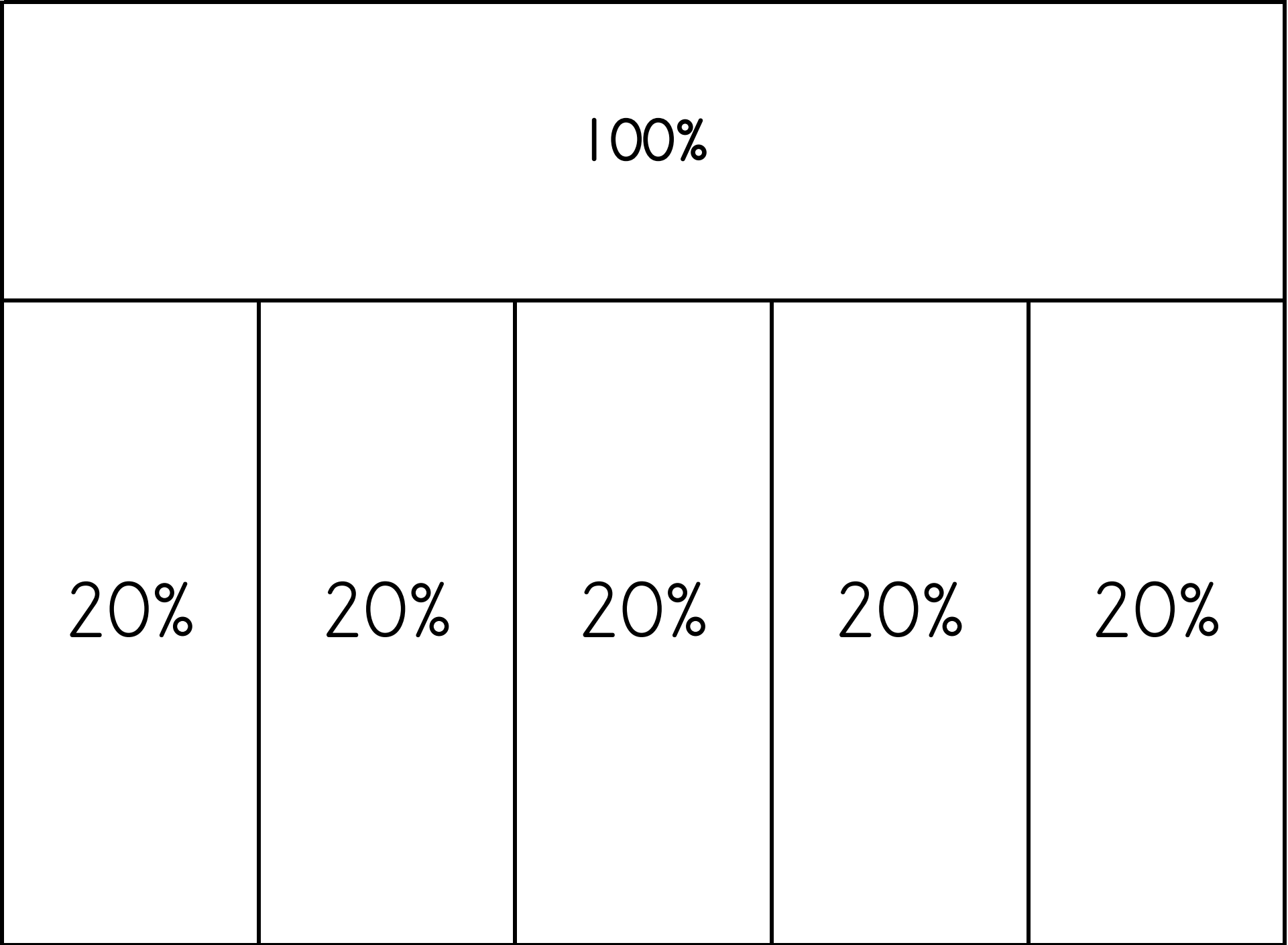
100%

25%

25%

25%

25%



100%

10%

10%

10%

10%

10%

10%

10%

10%

10%

10%

Control Card: Percent of a Number Commands

C1	50% of 100	=	50
C2	50% of 10	=	5
C3	50% of 80	=	40
C4	50% of 50	=	25
C5	50% of 20	=	10
C6	50% of 60	=	30
C7	20% of 100	=	20
C8	20% of 10	=	2
C9	20% of 50	=	10
C10	25% of 100	=	25
C11	25% of 40	=	10
C12	25% of 80	=	20
C13	25% of 20	=	5
C14	25% of 8	=	2
C15	25% of 60	=	15
C16	10% of 100	=	10
C17	10% of 70	=	7
C18	10% of 50	=	5
C19	10% of 40	=	4
C20	10% of 10	=	1
C21	10% of 30	=	3
C22	10% of 90	=	9
C23	10% of 20	=	2
C24	10% of 60	=	6

Percent of a Number: 50%

50% of 100 is _____

50% of 10 is _____

50% of 80 is _____

50% of 50 is _____

50% of 20 is _____

50% of 60 is _____

Percent of a Number: 20%

20% of 100 is _____

20% of 10 is _____

20% of 50 is _____

Percent of a Number: 25%

25% of 100 is _____

25% of 40 is _____

25% of 80 is _____

25% of 20 is _____

25% of 8 is _____

25% of 60 is _____

Percent of a Number: 10%

10% of 100 is _____

50% of 70 is _____

50% of 50 is _____

50% of 40 is _____

50% of 10 is _____

50% of 30 is _____

50% of 90 is _____

50% of 20 is _____

50% of 60 is _____

Percent of a Number: 50%

$$50\% \text{ of } 100 \text{ is } \underline{50}$$

$$50\% \text{ of } 10 \text{ is } \underline{5}$$

$$50\% \text{ of } 80 \text{ is } \underline{40}$$

$$50\% \text{ of } 50 \text{ is } \underline{25}$$

$$50\% \text{ of } 20 \text{ is } \underline{10}$$

$$50\% \text{ of } 60 \text{ is } \underline{30}$$

Percent of a Number: 20%

$$20\% \text{ of } 100 \text{ is } \underline{20}$$

$$20\% \text{ of } 10 \text{ is } \underline{2}$$

$$20\% \text{ of } 50 \text{ is } \underline{10}$$

Percent of a Number: 25%

$$25\% \text{ of } 100 \text{ is } \underline{25}$$

$$25\% \text{ of } 40 \text{ is } \underline{10}$$

$$25\% \text{ of } 80 \text{ is } \underline{20}$$

$$25\% \text{ of } 20 \text{ is } \underline{5}$$

$$25\% \text{ of } 8 \text{ is } \underline{2}$$

$$25\% \text{ of } 60 \text{ is } \underline{15}$$

Percent of a Number: 10%

$$10\% \text{ of } 100 \text{ is } \underline{10}$$

$$50\% \text{ of } 70 \text{ is } \underline{35}$$

$$50\% \text{ of } 50 \text{ is } \underline{25}$$

$$50\% \text{ of } 40 \text{ is } \underline{20}$$

$$50\% \text{ of } 10 \text{ is } \underline{5}$$

$$50\% \text{ of } 30 \text{ is } \underline{15}$$

$$50\% \text{ of } 90 \text{ is } \underline{45}$$

$$50\% \text{ of } 20 \text{ is } \underline{10}$$

$$50\% \text{ of } 60 \text{ is } \underline{30}$$