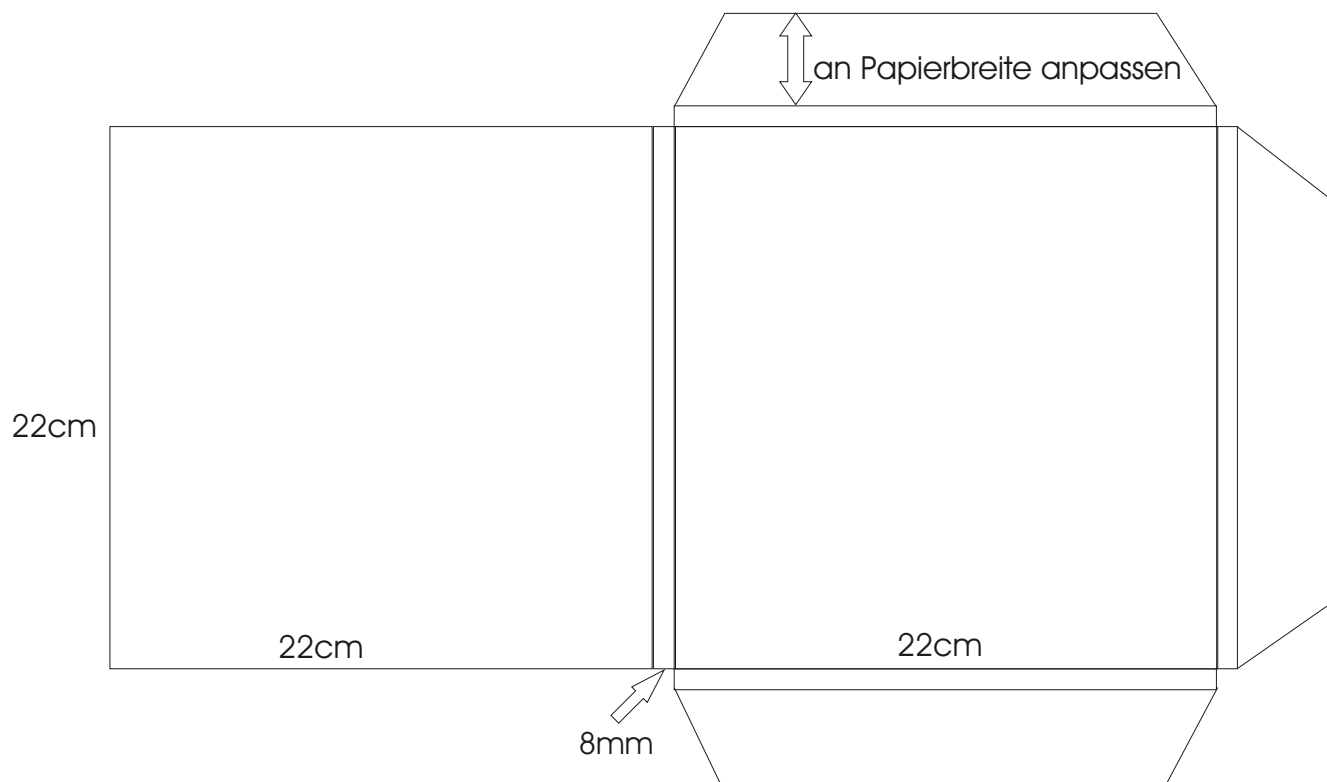


Die Lernscheiben sind anhand einer Originalscheibe nachgearbeitet. Natürlich erreiche ich nicht die Perfektion. Daher fehlen auch die beiden Löcher zum Auflegen. Diese sollten anhand einer Originalscheibe aufgezeichnet werden, das wird genauer. Eventuell das Loch etwas größer wählen. Beim Ausdrucken (möglichst auf Zeichenkarton) sollte man natürlich beachten, dass auf z.B. auf die Lösungskarte 5 auch die Aufgabenkarte 5 gedruckt wird. Dabei bitte nicht angeben: auf Seite einpassen.

Links und rechts werden die meisten Drucker auf den Lösungskarten einen weißen Randstreifen lassen, beim Ausschneiden muss der dran bleiben. Die Lernscheiben sind 21 cm groß! Es fehlt also immer etwas Farbe an 4 Bögen! Ich habe die Scheiben laminiert, dabei kann an den Zacken ein kleiner Rand verbleiben, an den Bögen jedoch nicht.

Aus Fotokarton Größe 35cm x 50 (oder 50x70, ergibt 2 Taschen), lässt sich relativ leicht eine Tasche zur Aufbewahrung basteln.





2















A large gray circle is centered on the page. Around its perimeter, numbers are placed at various points: 11 and 3 at the top; 6 and 10 on the upper left and right; 8 and 12 on the middle left and right; 4 and 7 on the lower left and right; 5 and 2 at the bottom left and right; and 9 and 13 at the bottom. Inside the circle, there are 14 horizontal bars, each containing an arithmetic problem and a colored dot. The problems are: $6 + 5 = \square$ (orange dot), $9 + \square = 11$ (purple dot), $8 + \square = 12$ (blue dot), $4 + 8 = \square$ (green dot), $9 + \square = 14$ (yellow dot), $10 + \square = 16$ (red dot), $\square - 9 = 4$ (red dot), $16 - \square = 6$ (blue dot), $15 - 8 = \square$ (orange dot), $13 - 5 = \square$ (purple dot), $17 - 8 = \square$ (green dot), and $11 - 8 = \square$ (yellow dot).

11

3

6

10

8

12

4

7

5

2

9

13

$6 + 5 = \square$



$9 + \square = 11$



$8 + \square = 12$



$4 + 8 = \square$



$9 + \square = 14$



$10 + \square = 16$



$\square - 9 = 4$



$16 - \square = 6$



$15 - 8 = \square$



$13 - 5 = \square$



$17 - 8 = \square$



$11 - 8 = \square$



A circular diagram with numbers around the perimeter and arithmetic problems inside. The numbers around the circle are: 5, 14, 11, 9, 2, 4, 6, 17, 10, 13, 8, 7. Inside the circle are 12 arithmetic problems, each with a colored dot next to it.

1 + = 11 ●

● 9 + 4 =

8 + 6 = ●

● + 10 = 14

9 + 8 = ●

● - 7 = 4

12 - 7 = ○

○ 14 - = 5

16 - 9 = ○

○ 16 - = 8

11 - 9 = ○

○ + 10 = 16

13 6

7 9

3 4

8 17

12 11

10 5

5 + = 11 ●

● 7 + 4 =

9 + = 12 ●

● 8 + = 13

10 + 7 = ●

● 7 + = 14

5 + = 15 ●

● - 7 = 6

- 9 = 3 ●

● 8 + = 16

12 - 8 = ●

● 17 - = 8

10 6

3 14

16 15

11 8

2 12

7 9

$2 + 9 = \square$ ●

● $10 + \square = 12$

$7 + \square = 13$ ●

● $10 + 5 = \square$

$8 + \square = 15$ ●

● $\square + 8 = 18$

$8 + \square = 17$ ●

● $\square - 7 = 9$

$\square - 7 = 7$ ●

● $6 + \square = 14$

$13 - 10 = \square$ ●

● $\square - 10 = 2$

A circular math puzzle with numbers around the perimeter and arithmetic problems inside. The numbers around the circle are: 12, 10, 4, 11, 9, 3, 7, 6, 19, 2, 5, 8. The arithmetic problems inside the circle are:

- $3 + 9 = \square$ (blue dot)
- $10 + \square = 13$ (blue dot)
- $9 + 10 = \square$ (red dot)
- $3 + 8 = \square$ (red dot)
- $9 + \square = 16$ (yellow dot)
- $8 + \square = 18$ (yellow dot)
- $14 - 10 = \square$ (purple dot)
- $13 - \square = 5$ (purple dot)
- $15 - \square = 6$ (green dot)
- $12 - \square = 7$ (green dot)
- $11 - \square = 9$ (orange dot)
- $12 - \square = 6$ (orange dot)

A large grey circle is centered on the page. Around its perimeter, numbers are placed at various points: 3, 15, 13, 8, 7, 10, 14, 9, 4, 5, 11, 6, and 6. Inside the circle, there are ten horizontal bars, each containing an arithmetic problem. Each bar is accompanied by a small colored circle. The problems are: $8 + \square = 11$ (blue dot), $10 + 4 = \square$ (purple dot), $6 + \square = 12$ (orange dot), $18 - 10 = \square$ (yellow dot), $4 + \square = 13$ (red dot), $\square - 6 = 7$ (green dot), $7 + \square = 17$ (yellow dot), $13 - \square = 9$ (blue dot), $7 + \square = 12$ (green dot), $\square + 8 = 15$ (orange dot), $9 + 6 = \square$ (purple dot), and $\square - 6 = 5$ (red dot).

3

15

6

$8 + \square = 11$ ●

13

● $10 + 4 = \square$

$6 + \square = 12$ ●

11

● $18 - 10 = \square$

$4 + \square = 13$ ●

8

● $\square - 6 = 7$

$7 + \square = 17$ ●

5

● $13 - \square = 9$

$7 + \square = 12$ ●

7

● $\square + 8 = 15$

$9 + 6 = \square$ ●

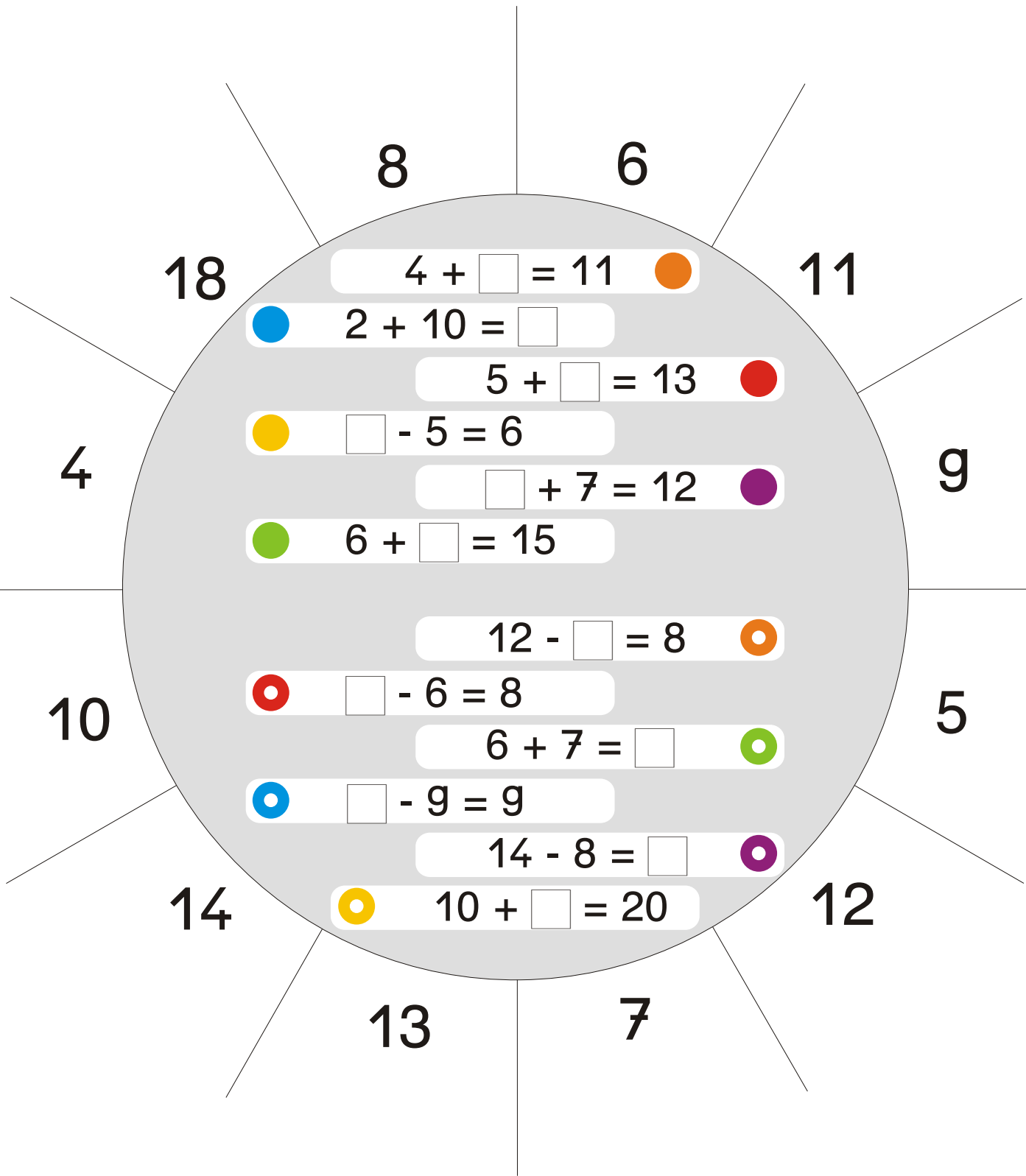
4

● $\square - 6 = 5$

10

9

14



18

8

6

11

$4 + \square = 11$

$2 + 10 = \square$

$5 + \square = 13$

$\square - 5 = 6$

$\square + 7 = 12$

$6 + \square = 15$

$12 - \square = 8$

$\square - 6 = 8$

$6 + 7 = \square$

$\square - 9 = 9$

$14 - 8 = \square$

$10 + \square = 20$

4

9

10

5

14

12

13

7

7 3

6 18

11 17

9 10

15 4

8 14

$10 + 1 = \square$ ●

● $5 + \square = 14$

$15 - \square = 9$ ●

● $3 + \square = 13$

$\square + 9 = 16$ ●

● $9 + 9 = \square$

$11 - \square = 7$ ●

● $\square - 10 = 7$

$11 - \square = 8$ ●

● $\square - 7 = 8$

$\square - 5 = 9$ ●

● $16 - \square = 8$