

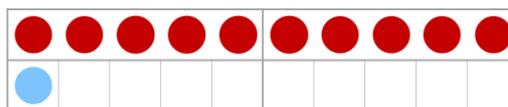
Arbeitsmaterial

Einfache Aufgaben der Addition und Subtraktion im Zahlenraum 20

Franziska Tilke, Lena Maiß & Karina Höveler

Unter Beratung von Samira Cormann, Lara Marie Graf,
Uta Häsel-Weide, Marcus Nührenbörger, Alissa Werner &
Inga Wienhues

Oktober 2022



Dieses Material wurde von Franziska Tilke, Lena Maiß & Karina Höveler unter Beratung von: Samira Cormann, Lara Graf, Uta Häsel-Weide, Marcus Nührenbörger, Alissa Werner & Inga Wienhues entwickelt. Es kann unter der Creative Commons Lizenz BY-NC-SA (Namensnennung – Nicht kommerziell – Weitergabe unter gleichen Bedingungen) 4.0 International weiterverwendet werden.

Zitierbar als

Tilke, F., Maiß, L. & Höveler, K. (2022). Einfache Aufgaben der Addition und Subtraktion im Zahlenraum 20. Open Educational Resources.

Projektherkunft

Dieses Material wurde für das Projekt Mathematik aufholen nach Corona erstellt und wird auch im Projekt QuaMath weiter genutzt (beide Projekte gemeinsam von den Ländern finanziert).

Hinweis zu verwandtem Material

Förder- und Diagnosematerial zu diesen Themen:

- (1) Kardinale Zahlbeziehungen (er-)kennen: Zahlzerlegungen und Zahlzusammensetzungen verstehen und systematisch betrachten (ZR 20)
- (2) Kardinale Zahlbeziehungen (er-)kennen: Zahlzerlegungen und Zahlzusammensetzungen automatisieren und produktiv üben (ZR 20)
- (3) Anzahlen strukturiert darstellen und erfassen (ZR 20)
- (4) Einfache Aufgaben der Addition und Subtraktion (ZR 20)
- (5) Anzahlen strukturiert darstellen und erfassen (ZR 100)
- (6) Einfache Aufgaben der Addition und Subtraktion (ZR 100)

In diesem Material wird eine für die Zifferschreibweise in der Primarstufe optimierte Schrift genutzt: Grundschrift des Grundschulverbands, verfügbar unter: grundschulverband.de/grundschrift

Wenn nicht auf Ihrem Computer installiert, werden betreffende Textstellen automatisch durch eine andere Schrift ersetzt und daher ggf. nicht korrekt angezeigt. Alternativ liegt dem Material ebenfalls eine PDF-Datei bei, die Sie ohne zusätzliche Schritte nutzen können.

1 Einfache und schwierige Aufgaben sortieren

Beobachtungsbogen: Einfache und schwierige Aufgaben sortieren
(ZR 10)

Beobachtung/Rechenweg/Erklärung:

| | |
|---------|--|
| $2 + 2$ | |
| $5 + 5$ | |
| $0 + 6$ | |
| $3 + 0$ | |
| $1 + 4$ | |
| $1 + 7$ | |
| $2 + 1$ | |
| $4 + 1$ | |
| $7 + 1$ | |
| $5 + 2$ | |
| $5 + 4$ | |
| $2 + 8$ | |
| $6 + 4$ | |
| $8 + 2$ | |
| $3 + 6$ | |
| $4 + 3$ | |
| $7 + 2$ | |

**Beobachtungsbogen: Einfache und schwierige Aufgaben sortieren
(ZR 10)**

Beobachtung/Rechenweg/Erklärung:

| | |
|--------|--|
| 8 - 4 | |
| 10 - 5 | |
| 3 - 0 | |
| 7 - 0 | |
| 6 - 1 | |
| 9 - 1 | |
| 10 - 5 | |
| 8 - 5 | |
| 10 - 2 | |
| 10 - 7 | |
| 9 - 6 | |
| 7 - 2 | |
| 8 - 4 | |

**Beobachtungsbogen: Einfache und schwierige Aufgaben sortieren
(ZR 20)**

Beobachtung/Rechenweg/Erklärung:

| | |
|----------|--|
| $5 + 5$ | |
| $7 + 7$ | |
| $9 + 9$ | |
| $8 + 0$ | |
| $0 + 11$ | |
| $7 + 1$ | |
| $1 + 13$ | |
| $16 + 1$ | |
| $5 + 2$ | |
| $7 + 5$ | |
| $5 + 9$ | |
| $8 + 2$ | |
| $6 + 4$ | |
| $10 + 6$ | |
| $4 + 10$ | |
| $7 + 10$ | |

**Beobachtungsbogen: Einfache und schwierige Aufgaben sortieren
(ZR 20)**

Beobachtung/Rechenweg/Erklärung:

| | |
|-----------|--|
| $18 - 9$ | |
| $10 - 5$ | |
| $5 - 0$ | |
| $17 - 0$ | |
| $6 - 1$ | |
| $14 - 1$ | |
| $7 - 5$ | |
| $19 - 5$ | |
| $10 - 2$ | |
| $10 - 7$ | |
| $12 - 10$ | |
| $16 - 10$ | |

Sortiere.

einfache Aufgaben

schwierige Aufgaben

Einfache und schwierige Aufgaben sortieren (ZR 10)

| | |
|---------|---------|
| $2 + 2$ | $5 + 5$ |
| $0 + 6$ | $3 + 0$ |
| $1 + 4$ | $1 + 7$ |
| $2 + 1$ | $4 + 1$ |
| $7 + 1$ | $5 + 2$ |
| $5 + 4$ | $2 + 8$ |

$6 + 4$

$8 + 2$

$3 + 6$

$4 + 3$

$7 + 2$

$7 - 2$

$8 - 4$

$3 - 0$

$7 - 0$

$6 - 1$

$9 - 1$

$8 - 5$

$10 - 2$

$10 - 7$

$9 - 6$

$10 - 5$

Einfache und schwierige Aufgaben sortieren (ZR 20)

$5 + 5$

$7 + 7$

$9 + 9$

$8 + 0$

$0 + 11$

$7 + 1$

$1 + 13$

$16 + 1$

$5 + 2$

$7 + 5$

$5 + 9$

$8 + 2$

$$6 + 4$$

$$10 + 6$$

$$4 + 10$$

$$7 + 10$$

$$12 - 10$$

$$16 - 10$$

$$18 - 9$$

$$10 - 5$$

$$5 - 0$$

$$17 - 0$$

$$6 - 1$$

$$14 - 1$$

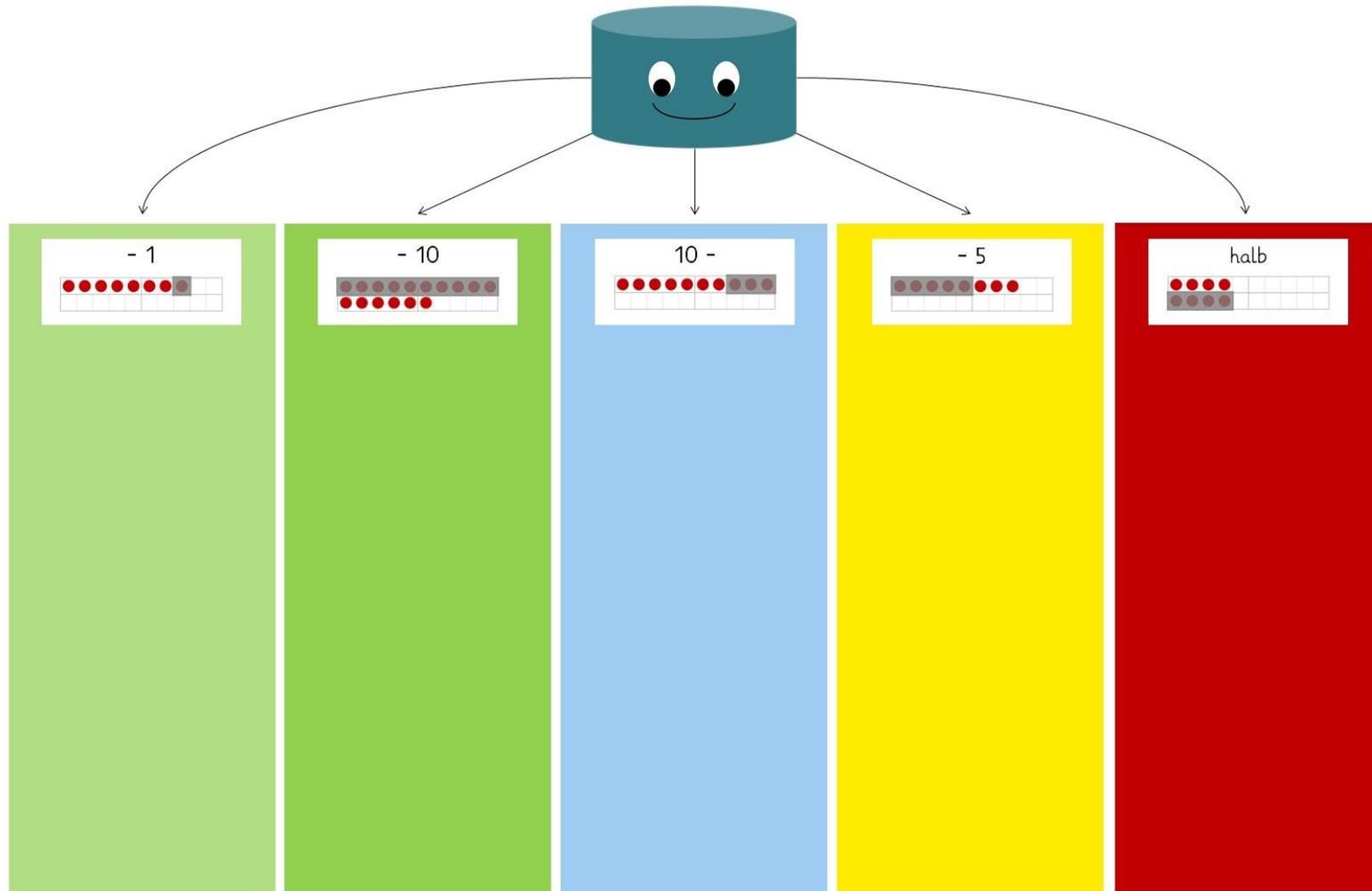
$$7 - 5$$

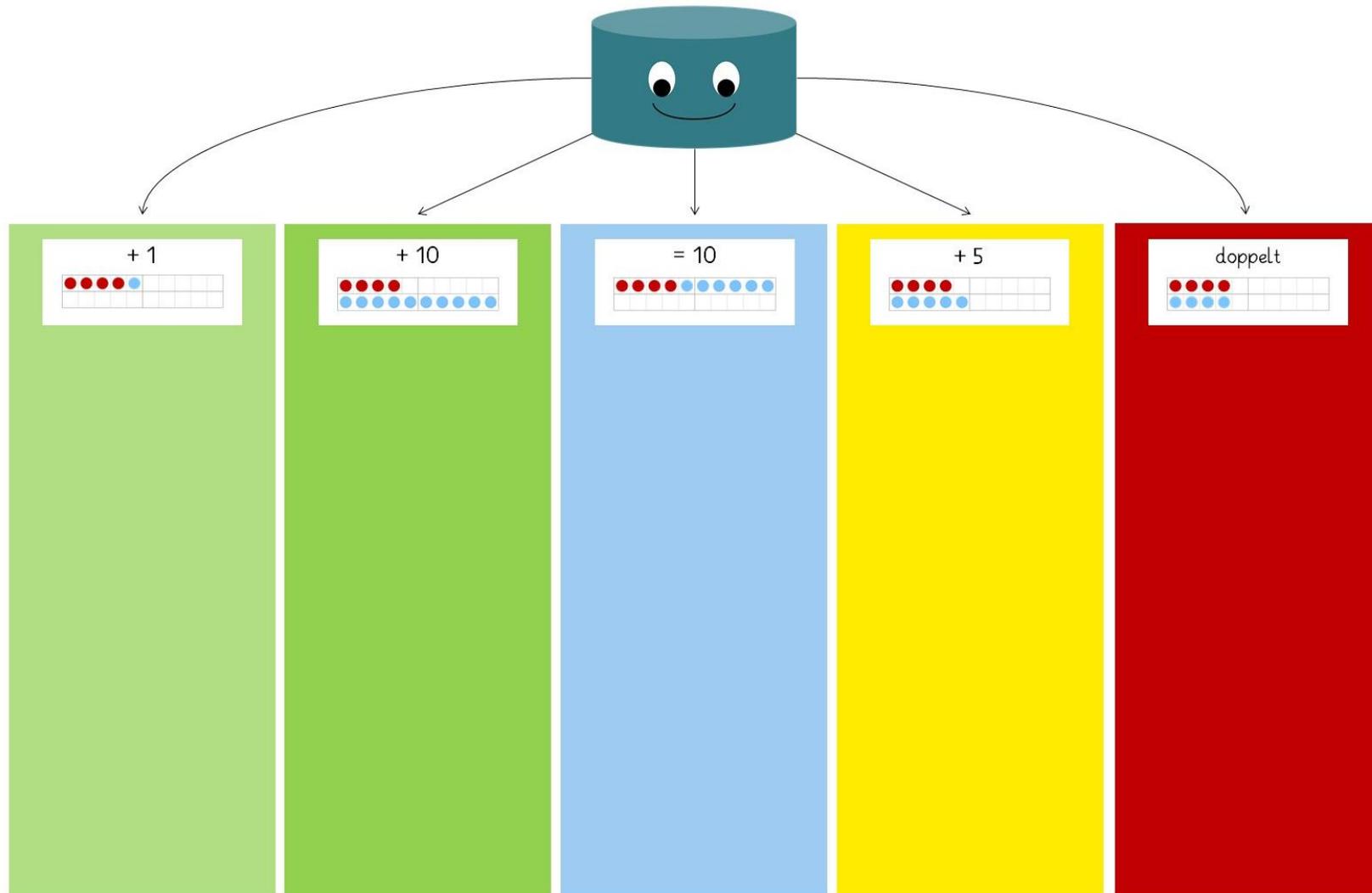
$$19 - 5$$

$$10 - 2$$

$$10 - 7$$

5.1 Sortieren mit der Sortiermaschine





5.2 Einfache Plusaufgaben

a) Unterstreiche in der passenden Farbe.

b) Rechne aus

$12 + 0 = \underline{\quad}$

$3 + 3 = \underline{\quad}$

$7 + 7 = \underline{\quad}$

$9 + 1 = \underline{\quad}$

$8 + 1 = \underline{\quad}$

$6 + 10 = \underline{\quad}$

$6 + 4 = \underline{\quad}$

$6 + 5 = \underline{\quad}$

$8 + 5 = \underline{\quad}$

$11 + 1 = \underline{\quad}$

$10 + 3 = \underline{\quad}$

$20 + 0 = \underline{\quad}$

$9 + 0 = \underline{\quad}$

$8 + 8 = \underline{\quad}$

$4 + 4 = \underline{\quad}$

$7 + 3 = \underline{\quad}$

$17 + 1 = \underline{\quad}$

$10 + 1 = \underline{\quad}$

$2 + 8 = \underline{\quad}$

$14 + 5 = \underline{\quad}$

$11 + 5 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$9 + 10 = \underline{\quad}$

$0 + 8 = \underline{\quad}$

5.2 Einfache Minusaufgaben

a) Unterstreiche in der passenden Farbe.

b) Rechne aus

$16 - 8 = \underline{\quad}$

$7 - 7 = \underline{\quad}$

$15 - 0 = \underline{\quad}$

$18 - 1 = \underline{\quad}$

$10 - 3 = \underline{\quad}$

$9 - 5 = \underline{\quad}$

$8 - 1 = \underline{\quad}$

$14 - 10 = \underline{\quad}$

$16 - 5 = \underline{\quad}$

$10 - 9 = \underline{\quad}$

$18 - 10 = \underline{\quad}$

$12 - 6 = \underline{\quad}$

$8 - 4 = \underline{\quad}$

$13 - 13 = \underline{\quad}$

$6 - 0 = \underline{\quad}$

$17 - 5 = \underline{\quad}$

$10 - 8 = \underline{\quad}$

$10 - 4 = \underline{\quad}$

$4 - 1 = \underline{\quad}$

$14 - 1 = \underline{\quad}$

$8 - 5 = \underline{\quad}$

$15 - 10 = \underline{\quad}$

$12 - 10 = \underline{\quad}$

$14 - 7 = \underline{\quad}$

6 Automatisierung der einfachen Aufgaben in Aufgabengruppen

Aufgabenkarten zur Automatisierung der Aufgabengruppen

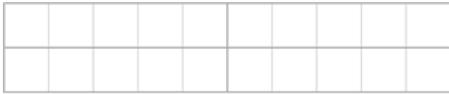
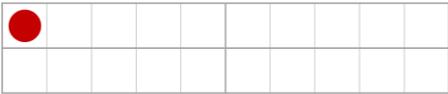
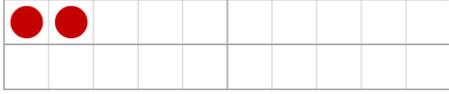
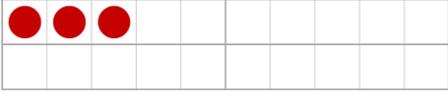
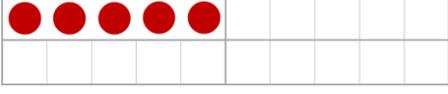
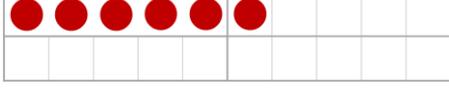
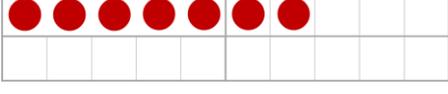
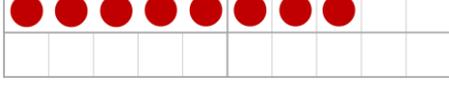
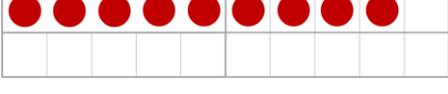
Addition

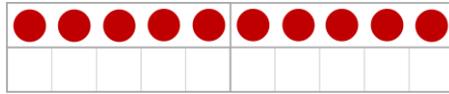
- 6.1 Addition von 0
- 6.2 Addition von 1
- 6.3 Addition von 5
- 6.4 Additions von 10
- 6.5 Ergänzen bis 10
- 6.6 Verdopplungsaufgaben

Subtraktion

- 6.7 Subtraktion von 0
- 6.8 Subtraktion von 1
- 6.9 Subtraktion von 5
- 6.10 Subtraktion von 10
- 6.11 Umkehrungen von Zehnerergänzungen (10 -)
- 6.12 Umkehrungen von Verdopplungsaufgaben

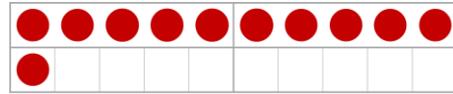
6.1 Addition von 0

| | |
|---|--|
|  $0 + 0$ |  $1 + 0$ $0 + 1$ |
|  $2 + 0$ $0 + 2$ |  $3 + 0$ $0 + 3$ |
|  $4 + 0$ $0 + 4$ |  $5 + 0$ $0 + 5$ |
|  $6 + 0$ $0 + 6$ |  $7 + 0$ $0 + 7$ |
|  $8 + 0$ $0 + 8$ |  $9 + 0$ $0 + 9$ |



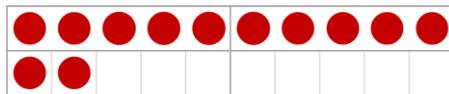
$$10 + 0$$

$$0 + 10$$



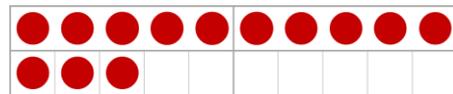
$$11 + 0$$

$$0 + 11$$



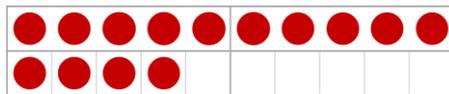
$$12 + 0$$

$$0 + 12$$



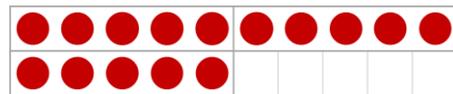
$$13 + 0$$

$$0 + 13$$



$$14 + 0$$

$$0 + 14$$



$$15 + 0$$

$$0 + 15$$



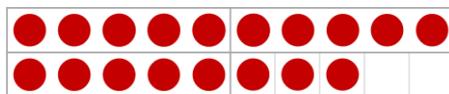
$$16 + 0$$

$$0 + 16$$



$$17 + 0$$

$$0 + 17$$



$$18 + 0$$

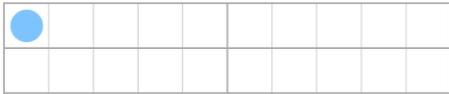
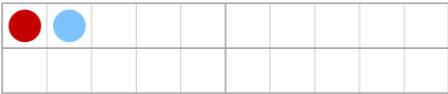
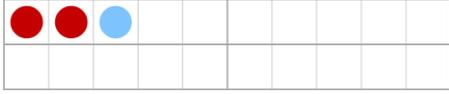
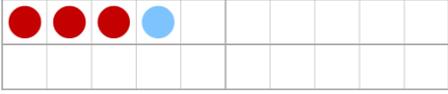
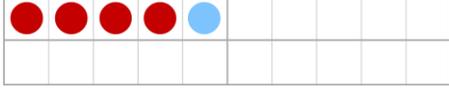
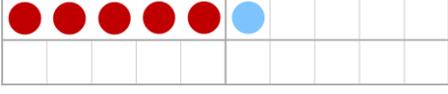
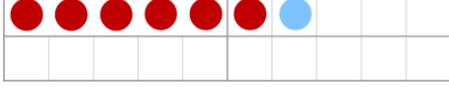
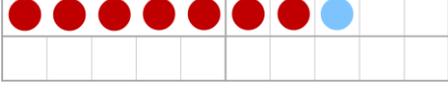
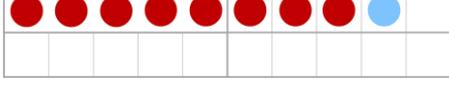
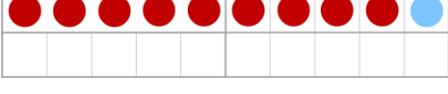
$$0 + 18$$

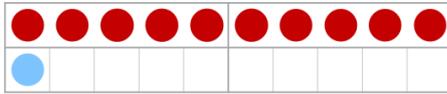


$$19 + 0$$

$$0 + 19$$

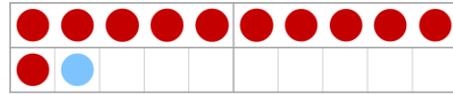
6.2 Addition von 1

| | |
|---|--|
|  $0 + 1$ $1 + 0$ |  $1 + 1$ |
|  $2 + 1$ $1 + 2$ |  $3 + 1$ $1 + 3$ |
|  $4 + 1$ $1 + 4$ |  $5 + 1$ $1 + 5$ |
|  $6 + 1$ $1 + 6$ |  $7 + 1$ $1 + 7$ |
|  $8 + 1$ $1 + 8$ |  $9 + 1$ $1 + 9$ |



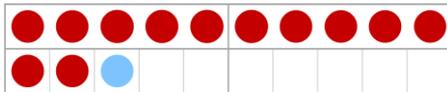
$$10 + 1$$

$$1 + 10$$



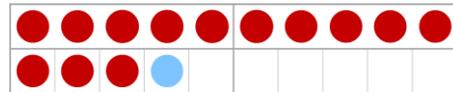
$$11 + 1$$

$$1 + 11$$



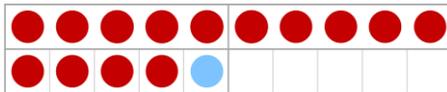
$$12 + 1$$

$$1 + 12$$



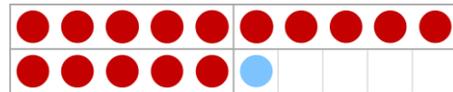
$$13 + 1$$

$$1 + 13$$



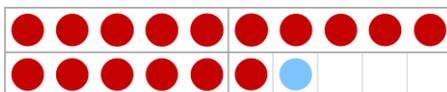
$$14 + 1$$

$$1 + 14$$



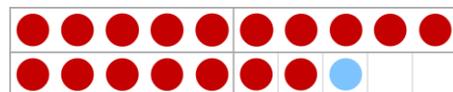
$$15 + 1$$

$$1 + 15$$



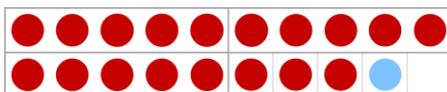
$$16 + 1$$

$$1 + 16$$



$$17 + 1$$

$$1 + 17$$



$$18 + 1$$

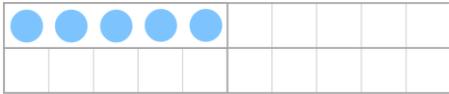
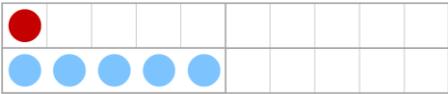
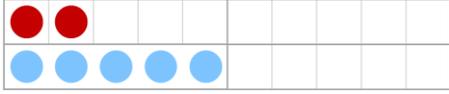
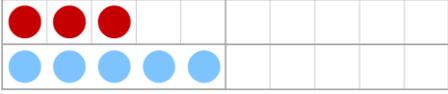
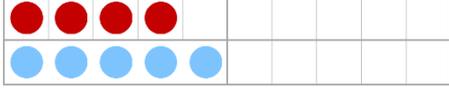
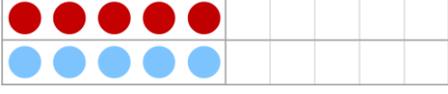
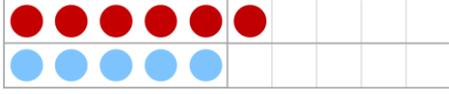
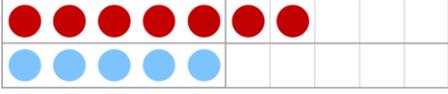
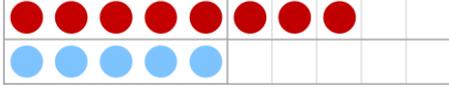
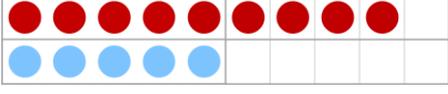
$$1 + 18$$

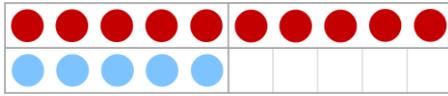


$$19 + 1$$

$$1 + 19$$

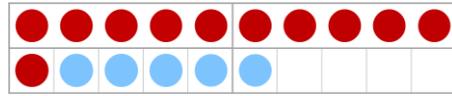
6.3 Addition von 5

| | |
|---|--|
|  $0 + 5$ $5 + 0$ |  $1 + 5$ $5 + 1$ |
|  $2 + 5$ $5 + 2$ |  $3 + 5$ $5 + 3$ |
|  $4 + 5$ $5 + 4$ |  $5 + 5$ |
|  $6 + 5$ $5 + 6$ |  $7 + 5$ $5 + 7$ |
|  $8 + 5$ $5 + 8$ |  $9 + 5$ $5 + 9$ |



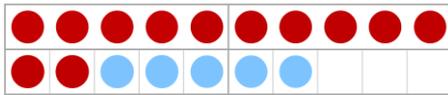
$$10 + 5$$

$$5 + 10$$



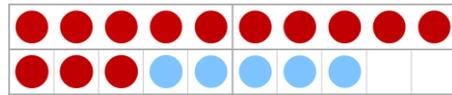
$$11 + 5$$

$$5 + 11$$



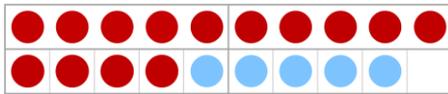
$$12 + 5$$

$$5 + 12$$



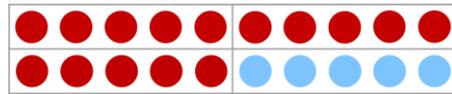
$$13 + 5$$

$$5 + 13$$



$$14 + 5$$

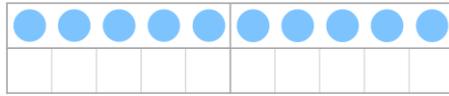
$$5 + 14$$



$$15 + 5$$

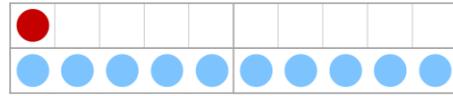
$$5 + 15$$

6.4 Addition von 10



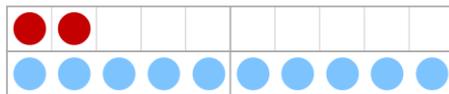
$$0 + 10$$

$$10 + 0$$



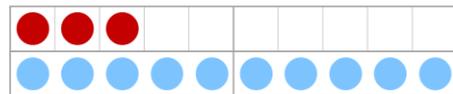
$$1 + 10$$

$$10 + 1$$



$$2 + 10$$

$$10 + 2$$



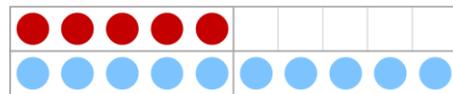
$$3 + 10$$

$$10 + 3$$



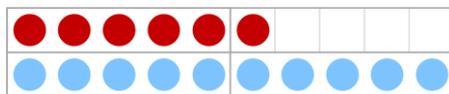
$$4 + 10$$

$$10 + 4$$



$$5 + 10$$

$$10 + 5$$



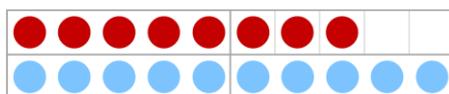
$$6 + 10$$

$$10 + 6$$



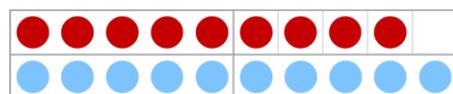
$$7 + 10$$

$$10 + 7$$



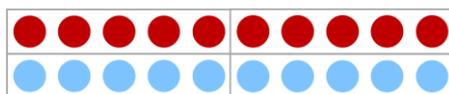
$$8 + 10$$

$$10 + 8$$



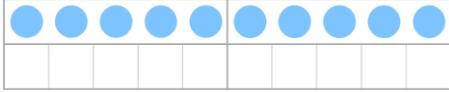
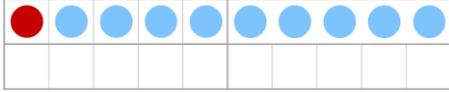
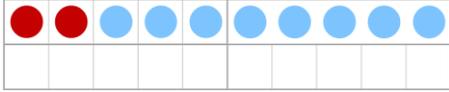
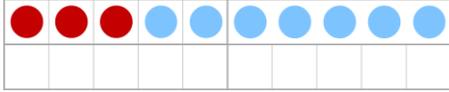
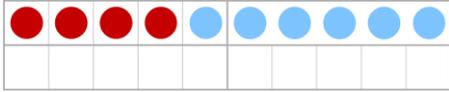
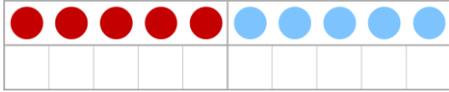
$$9 + 10$$

$$10 + 9$$

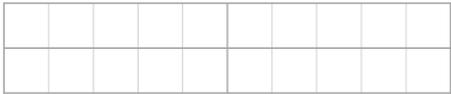
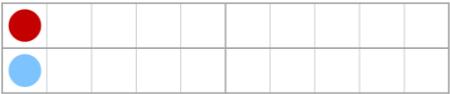
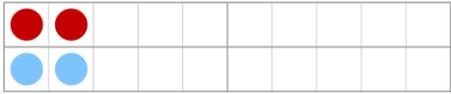
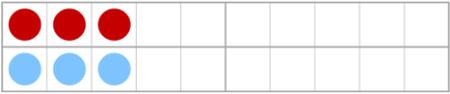
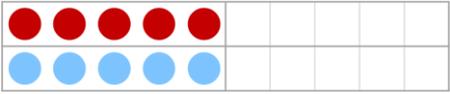
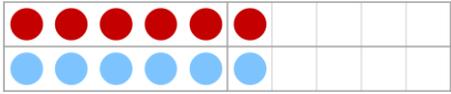
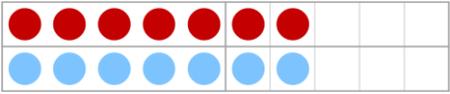
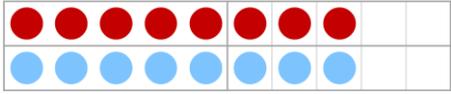
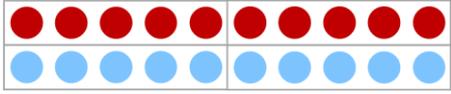


$$10 + 10$$

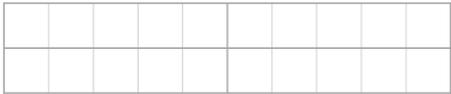
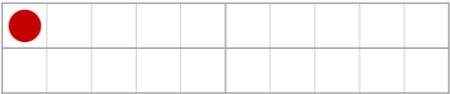
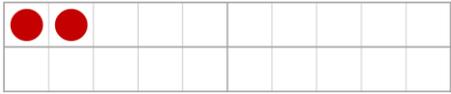
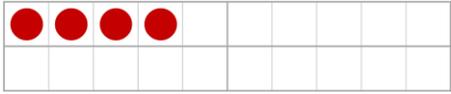
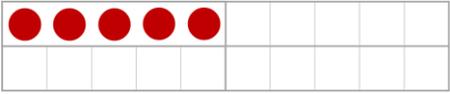
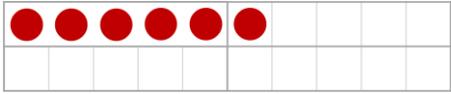
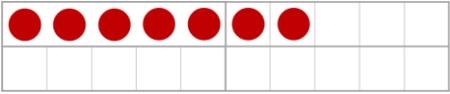
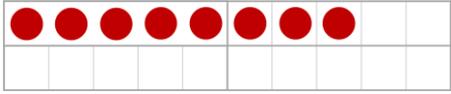
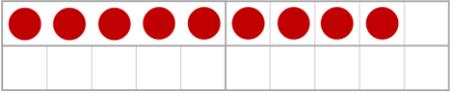
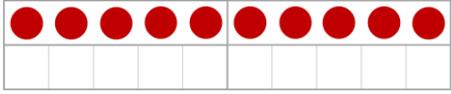
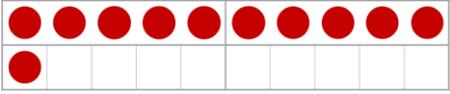
6.5 Ergänzen bis 10

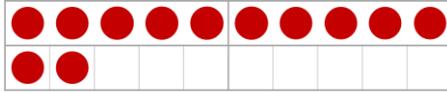
| | |
|---|--|
|  $0 + 10$ $10 + 0$ |  $1 + 9$ $9 + 1$ |
|  $2 + 8$ $8 + 2$ |  $3 + 7$ $7 + 3$ |
|  $4 + 6$ $6 + 4$ |  $5 + 5$ |

6.6 Verdopplungsaufgaben

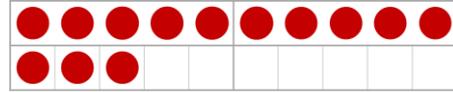
| | |
|--|---|
|  $0 + 0$ |  $1 + 1$ |
|  $2 + 2$ |  $3 + 3$ |
|  $4 + 4$ |  $5 + 5$ |
|  $6 + 6$ |  $7 + 7$ |
|  $8 + 8$ |  $9 + 9$ |
|  $10 + 10$ | |

6.7 Subtraktion von 0

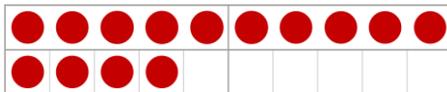
| | |
|---|--|
|  $0 - 0$ |  $1 - 0$ |
|  $2 - 0$ |  $3 - 0$ |
|  $4 - 0$ |  $5 - 0$ |
|  $6 - 0$ |  $7 - 0$ |
|  $8 - 0$ |  $9 - 0$ |
|  $10 - 0$ |  $11 - 0$ |



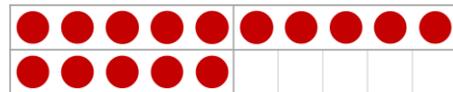
$$12 - 0$$



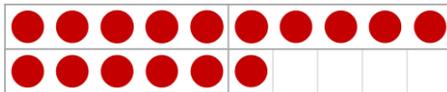
$$13 - 0$$



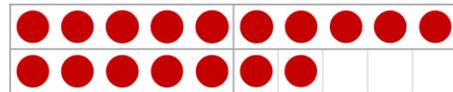
$$14 - 0$$



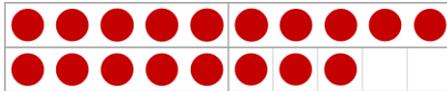
$$15 - 0$$



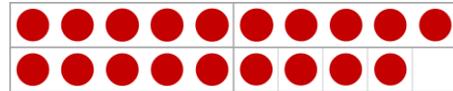
$$16 - 0$$



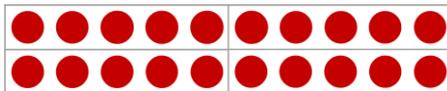
$$17 - 0$$



$$18 - 0$$

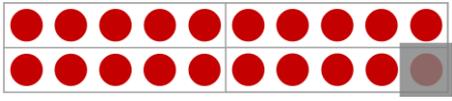
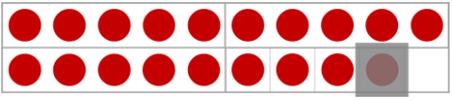
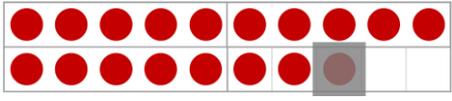
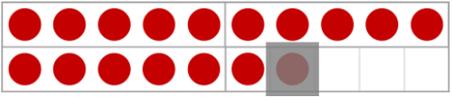
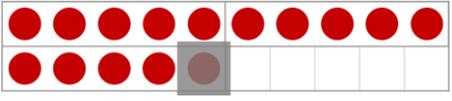
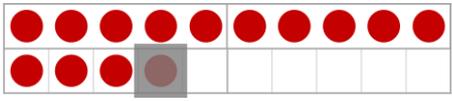
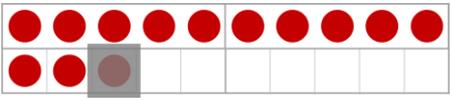
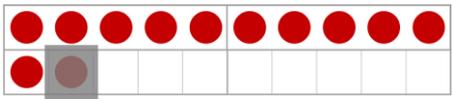
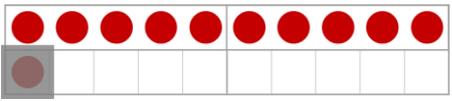


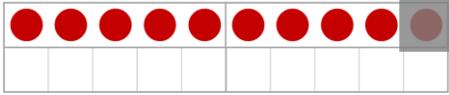
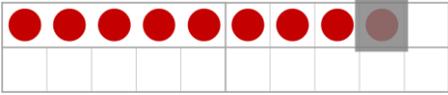
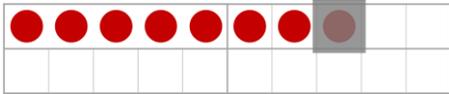
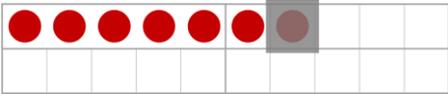
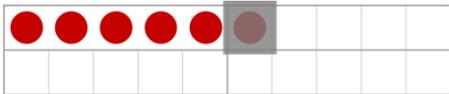
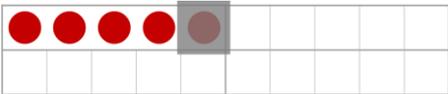
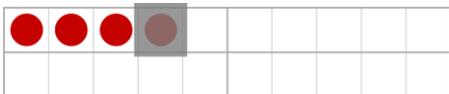
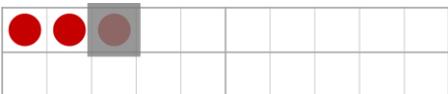
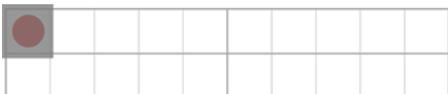
$$19 - 0$$



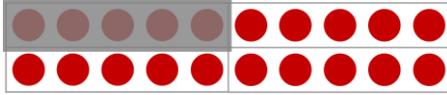
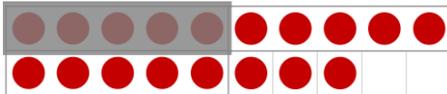
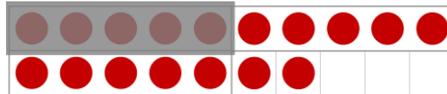
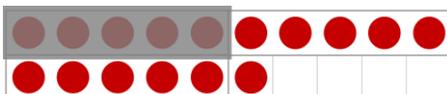
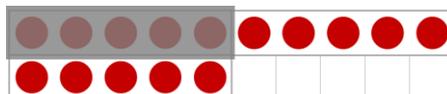
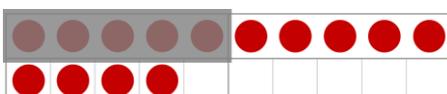
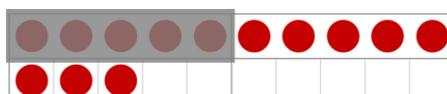
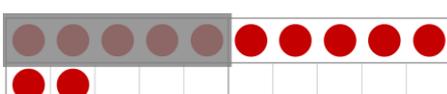
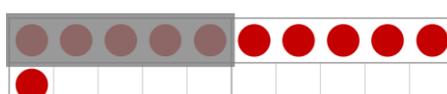
$$20 - 0$$

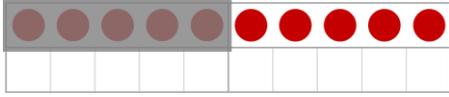
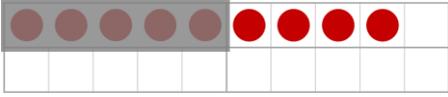
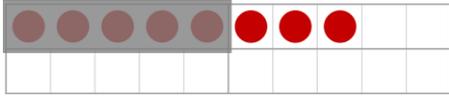
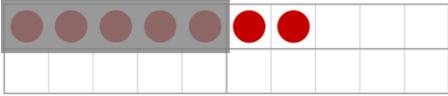
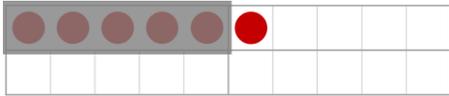
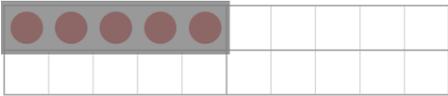
6.8 Subtraktion von 1

| | |
|---|--|
|  $20 - 1$ |  $19 - 1$ |
|  $18 - 1$ |  $17 - 1$ |
|  $16 - 1$ |  $15 - 1$ |
|  $14 - 1$ |  $13 - 1$ |
|  $12 - 1$ |  $11 - 1$ |

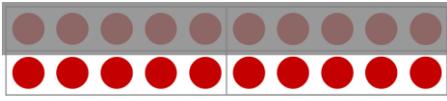
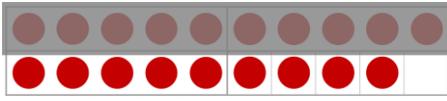
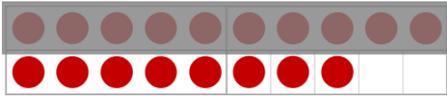
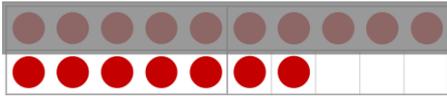
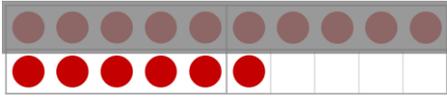
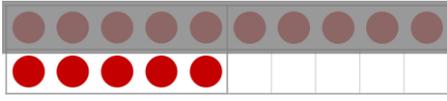
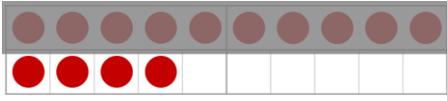
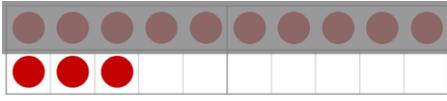
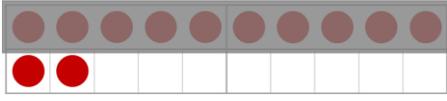
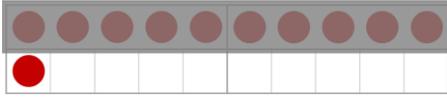
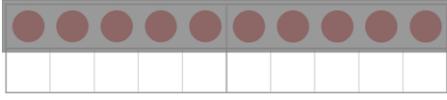
| | |
|--|---|
|  $10 - 1$ |  $9 - 1$ |
|  $8 - 1$ |  $7 - 1$ |
|  $6 - 1$ |  $5 - 1$ |
|  $4 - 1$ |  $3 - 1$ |
|  $2 - 1$ |  $1 - 1$ |

6.9 Subtraktion von 5

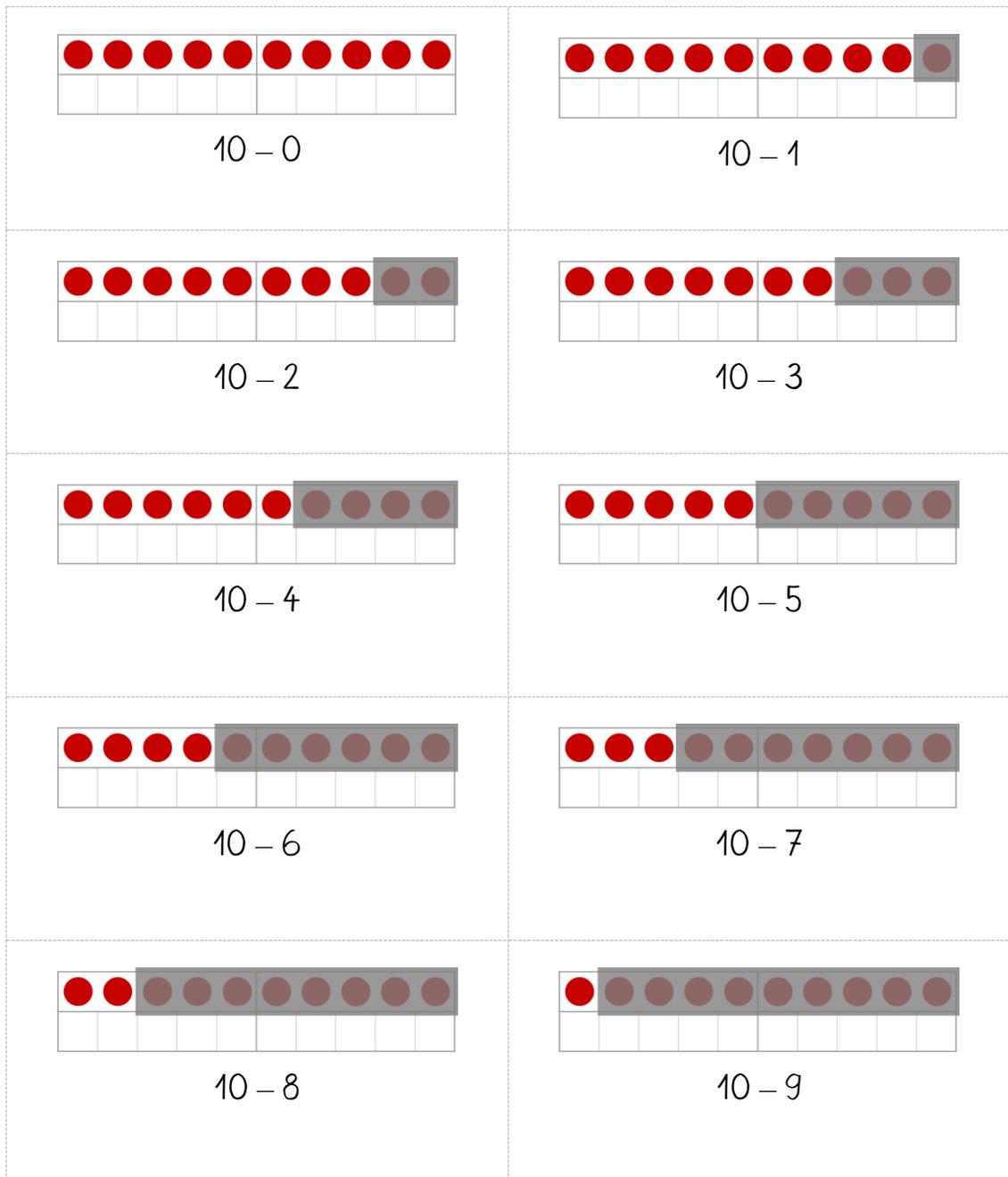
| | |
|---|--|
|  $20 - 5$ |  $19 - 5$ |
|  $18 - 5$ |  $17 - 5$ |
|  $16 - 5$ |  $15 - 5$ |
|  $14 - 5$ |  $13 - 5$ |
|  $12 - 5$ |  $11 - 5$ |

| | |
|---|---|
|  $10 - 5$ |  $9 - 5$ |
|  $8 - 5$ |  $7 - 5$ |
|  $6 - 5$ |  $5 - 5$ |

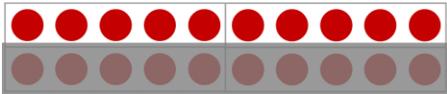
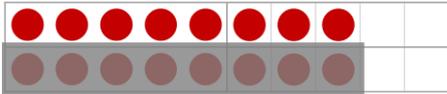
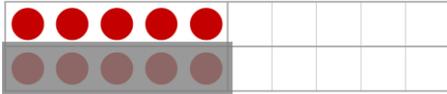
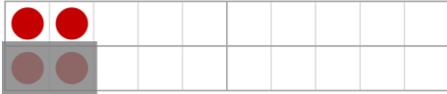
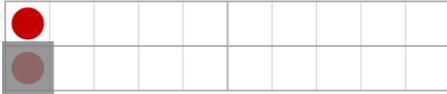
6.10 Subtraktion von 10

| | |
|--|---|
|  $20 - 10$ |  $19 - 10$ |
|  $18 - 10$ |  $17 - 10$ |
|  $16 - 10$ |  $15 - 10$ |
|  $14 - 10$ |  $13 - 10$ |
|  $12 - 10$ |  $11 - 10$ |
|  $10 - 10$ | |

6.11 Umkehrungen von Zehnerergänzungen



6.12 Umkehrungen von Verdopplungsaufgaben

| | |
|--|---|
|  $20 - 10$ |  $18 - 9$ |
|  $16 - 8$ |  $14 - 7$ |
|  $12 - 6$ |  $10 - 5$ |
|  $8 - 4$ |  $6 - 3$ |
|  $4 - 2$ |  $2 - 1$ |