

Arbeitsblatt: Die Länge als physikalische Größe (Teil I)

| | | |
|--------------------|--------------------|------------------------|
| 1 Kilometer = 1km | 1 Meter = 1m | 1 Dezimeter = 1dm |
| 1 Zentimeter = 1cm | 1 Millimeter = 1mm | 1 Mikrometer = 1 μ |

Umrechnungen

| | km | m | dm | cm | mm |
|----|-------------------|-------------------|--------------------|---------------------|----------------------|
| km | 1 | 0,001 = 10^{-3} | 0,0001 = 10^{-4} | 0,00001 = 10^{-5} | 0,000001 = 10^{-6} |
| m | 1000 = 10^3 | 1 | 0,1 = 10^{-1} | 0,01 = 10^{-2} | 0,001 = 10^{-3} |
| dm | 10.000 = 10^4 | 10 = 10^1 | 1 | 0,1 = 10^{-1} | 0,01 = 10^{-2} |
| cm | 100.000 = 10^5 | 100 = 10^2 | 10 = 10^1 | 1 | 0,1 = 10^{-1} |
| mm | 1000.000 = 10^6 | 1000 = 10^3 | 100 = 10^2 | 10 = 10^1 | 1 |

1. Rechne alle Längenangaben in Kilometer um.

| | | | |
|-----|---------------------------------|----------------------------------|--------------------------------|
| 1.1 | 12m = <input type="text"/> km | 3,4m = <input type="text"/> km | 0,5m = <input type="text"/> km |
| | 7,03m = <input type="text"/> km | 0,123m = <input type="text"/> km | 120m = <input type="text"/> km |

| | | | |
|-----|----------------------------------|----------------------------------|-----------------------------------|
| 1.2 | 120 dm = <input type="text"/> km | 9 dm = <input type="text"/> km | 0,5 dm = <input type="text"/> km |
| | 6,5 dm = <input type="text"/> km | 0,1 dm = <input type="text"/> km | 1200 dm = <input type="text"/> km |

| | | | |
|-----|-----------------------------------|----------------------------------|-----------------------------------|
| 1.3 | 1200 cm = <input type="text"/> km | 300 cm = <input type="text"/> km | 25 cm = <input type="text"/> km |
| | 3 cm = <input type="text"/> km | 0,1 cm = <input type="text"/> km | 2400 cm = <input type="text"/> km |

| | | | |
|-----|------------------------------------|-----------------------------------|------------------------------------|
| 1.4 | 20000 mm = <input type="text"/> km | 7000 mm = <input type="text"/> km | 300 mm = <input type="text"/> km |
| | 25 mm = <input type="text"/> km | 7 mm = <input type="text"/> km | 40000 mm = <input type="text"/> km |

2. Rechne alle Längenangaben in Meter um.

| | | | |
|-----|---------------------------------|----------------------------------|--------------------------------|
| 2.1 | 12km = <input type="text"/> m | 3,4km = <input type="text"/> m | 0,5km = <input type="text"/> m |
| | 7,03km = <input type="text"/> m | 0,123km = <input type="text"/> m | 140km = <input type="text"/> m |

| | | | |
|-----|---------------------------------|---------------------------------|----------------------------------|
| 2.2 | 120 dm = <input type="text"/> m | 9 dm = <input type="text"/> m | 0,5 dm = <input type="text"/> m |
| | 6,5 dm = <input type="text"/> m | 0,1 dm = <input type="text"/> m | 1500 dm = <input type="text"/> m |

| | | | |
|-----|----------------------------------|---------------------------------|----------------------------------|
| 2.3 | 1200 cm = <input type="text"/> m | 300 cm = <input type="text"/> m | 25 cm = <input type="text"/> m |
| | 3 cm = <input type="text"/> m | 0,1 cm = <input type="text"/> m | 1600 cm = <input type="text"/> m |

| | | | |
|-----|-----------------------------------|----------------------------------|----------------------------------|
| 2.4 | 20000 mm = <input type="text"/> m | 7000 mm = <input type="text"/> m | 300 mm = <input type="text"/> m |
| | 25 mm = <input type="text"/> m | 7 mm = <input type="text"/> m | 5000 mm = <input type="text"/> m |