**Arbeitsblatt für Tablets „POTENZEN“**

24 = 2 ∙ 2 ∙ 2 ∙ 2 = 16

(-2) 4 = (-2) ∙ (-2) ∙ (-2) ∙ (-2) = + 16

-2 4 = **-** 2 ∙ 2 ∙ 2 ∙ 2 = **-** 16

$2^{-4}= \frac{1}{2^{4}}$ = $\frac{1}{16}$= 0,0625

2,56 ∙ 10³ = 2560

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| **Thema** | **Link** | **QR-Code** | **erledigt** |
| **Learning Apps ☺ 😐 ☹** |
| 1. Potenzen (Zuordnung)
 | <http://learningapps.org/1385075> |  |  |
| 1. Potenzen (Millionenshow)
 | <http://learningapps.org/473302> |  |  |
| 1. 2er Potenzen (Zahlenstrahl)
 | <http://learningapps.org/124415> |  |  |
| 1. 10er Potenzen (Zahlen ordnen)
 | <http://learningapps.org/26068> |  |  |
| 1. Potenzen der Größe nach ordnen(negative Zahlen)
 | <http://learningapps.org/1109904> |  |  |
| 1. Potenzen mit negativen Zahlen Puzzle)
 | <http://learningapps.org/1109917> |  |  |
| **Realmath.de** |
| 1. Potenzrechnung (Unterscheide zwei Arten!)
 | <http://www.realmath.de/Neues/Klasse7/ganzzahl/rechnemitpo01.html> |  |  |
| 1. Potenzen verbinden(Ganze Zahlen)
 | <http://www.realmath.de/Neues/Klasse7/ganzzahl/rechnemitpo.html> |  |  |

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| **Zweierpotenzen (2er Potenzen)**

|  |  |
| --- | --- |
| 1² = 1 ∙ 1 = 1 | 11² = 11 ∙ 11 = 121 |
|  2² = 2 ∙ 2 = 4 | 12² =  |
| 3² =  | 13² =  |
| 4² =  | 14² =  |
| 5² = | 15² = |
| 6² = | 16² = |
| 7² = | 17² = |
| 8² = | 18² = |
| 9² = | 19² = |
| 10² = | 20² = |

 | **Potenzen mit negativer Basis (Grundzahl)**

|  |
| --- |
| (-2)1 = (-2) = - 2 |
| (-2)² = (-2) ∙ (-2) = +4 |
| (-2)3 = (-2) ∙ (-2) ∙ (-2) = - 8 |
| (-2)4 = |
| (-2)5 = |
| (-2)6 = |
| (-2)7 = |
| (-2)8 = |
| (-2)9 = |
| (-2)10 = |

 |

**Zehnerpotenzen (10er Potenzen)**

|  |
| --- |
|  10 = 10 = 101 |
|  100 = 10 ∙ 10 = 102 |
|  1000 = 10 ∙ 10 ∙ 10 = 103 |
|  10 000 = 10 ∙ 10 ∙ 10 ∙ 10 = 104 |
|  100 000 = |
|  1 000 000 = |
|  10 000 000 = |
|  100 000 000 = |
| 1 000 000 000 = |



**Schreibe mit Vorzahl und Zehnerpotenz! Schreibe als natürliche Zahl!**

|  |  |
| --- | --- |
| 4 000 = 4 ∙ 1000 =  | 5 ∙ 102 = 5 ∙ 100 = 500 |
| 30 000 =  | 8 ∙ 104 = |
| 9 000 000 = | 2 ∙ 105 = |