**Poluga**

U Google preglednik upiši ***phet***

Otvori **PhET Simulations /Physics / Motion / Balancing Act**

<https://phet.colorado.edu/sims/html/balancing-act/latest/balancing-act_en.html>

1. ***Intro*** – uravnoteži polugu
2. ***Balance Lab***
* uravnoteži polugu, popuni tablicu
* Napomena: moguće je na više načina uravnotežiti polugu!

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **m1 / kg** | **m2 / kg** | **k1 / m** | **k2 / m** |  |  |
|  **5** | **10** |  |  |  |  |
| **10** | **20** |  |  |  |  |
| **5** | **20** |  |  |  |  |
| **5** | **15** |  |  |  |  |
| **Dječak****20** | **Otac****80** |  |  |  |  |
| **Djevojčica****30** | **Majka****60** |  |  |  |  |

Odredi nepoznate mase poklona A, B, C i D.

 **mA =**

 **mB =**

 **mC =**

 **mD =**

1. ***Game***

Odigraj igru - **Level 1**

**Ovdje upiši svoj rezultat \_\_\_\_\_\_ / 12**

**Upute za učitelja / rješenja**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **m1 / kg** | **m2 / kg** | **k1 / m** | **k2 / m** | ***Ovdje ne pišu ništa*** | ***Ovdje ne pišu ništa*** |
|  **5** | **10** | *2* | *1* | *Sljedeći sat* | *Sljedeći sat* |
| *1* | *0.5* |
| *1.5* | *0.75* |
|  |  |  |  |  |  |
| **10** | **20** | *2* | *1* |  |  |
| *1* | *0.5* |
| *0.5* | *0.25* |
|  |  |  |  |  |  |
| **5** | **20** | *2* | *0.5* |  |  |
| *1* | *0.25* |
|  |  |  |  |  |  |
| **5** | **15** | *1.5* | *0.5* |  |  |
| *0.75* | *0.25* |
|  |  |  |  |  |  |
| **Dječak****20** | **Otac****80** | *2* | *0.5* |  |  |
| *1* | *0.25* |
|  |  |  |  |  |  |
| **Djevojčica****30** | **Majka****60** | *2* | *1* |  |  |
| *1* | *0.5* |
| *0.5* | *0.25* |

**Pokloni:**

 **mA = 20 kg, mB = 5 kg, mC = 15 kg, mD = 10 kg**

**Game - *rješenja***

|  |  |  |  |
| --- | --- | --- | --- |
| **zadatak** | **LEVEL 1** | **LEVEL 2** | **LEVEL 3** |
| **1** | **1.5 m** | **b)** | **0.75 m** |
| **2** | **c)** | **0.5 m** | **20 kg** |
| **3** | **0.5 m** | **45 kg** | **a)** |
| **4** | **30 kg** | **a)** | **1 m** |
| **5** | **c)** | **10 kg** | **a)** |
| **6** | **60 kg** | **1.5 m** | **5 kg** |