

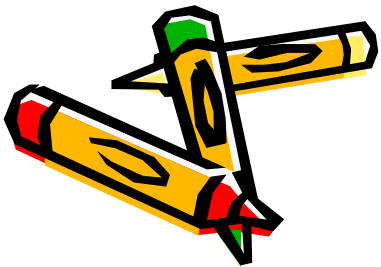
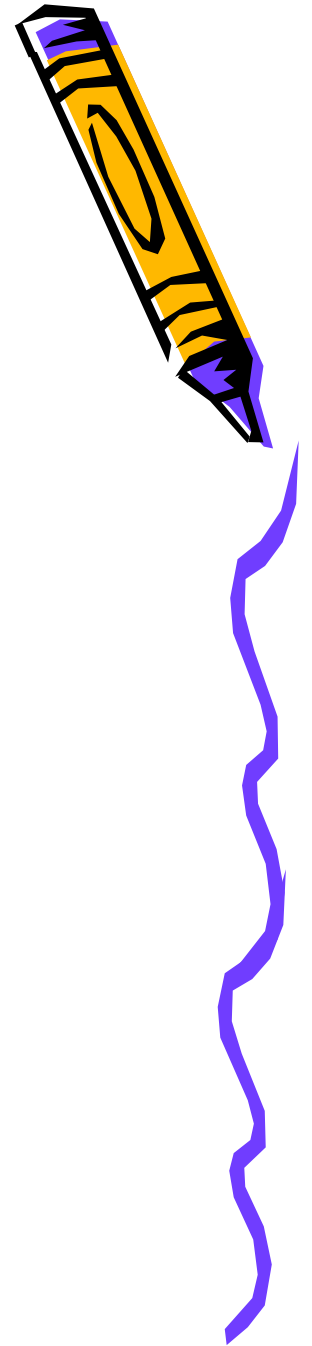
Ujumine

Füüsika
8 klass
Antsla Gümnaasium



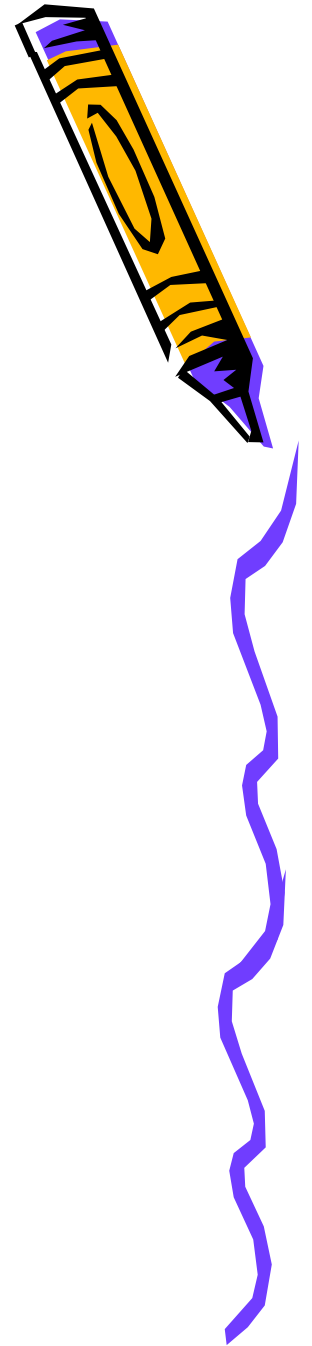
Eelmine tund

- 1) Mis on üleslükkejõud?
- 2) Millega on võrdne üleslükkejõud?
- 3) Sõnasta Archimedese seadus

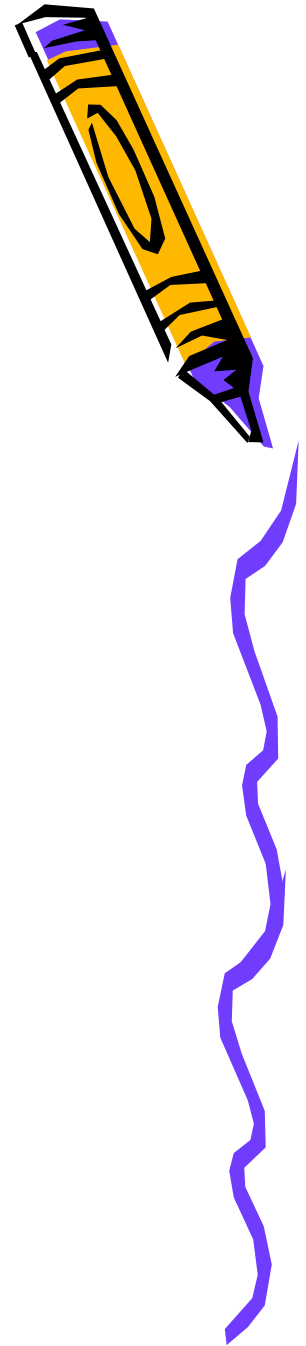


Kodune ülesanne

ÜI.7 lk. 128

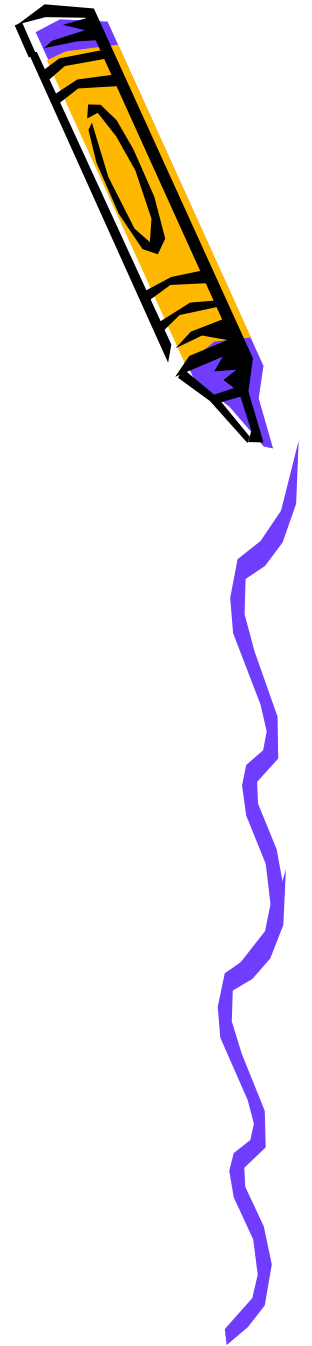


Mida Sina mõistad
ujumise all?



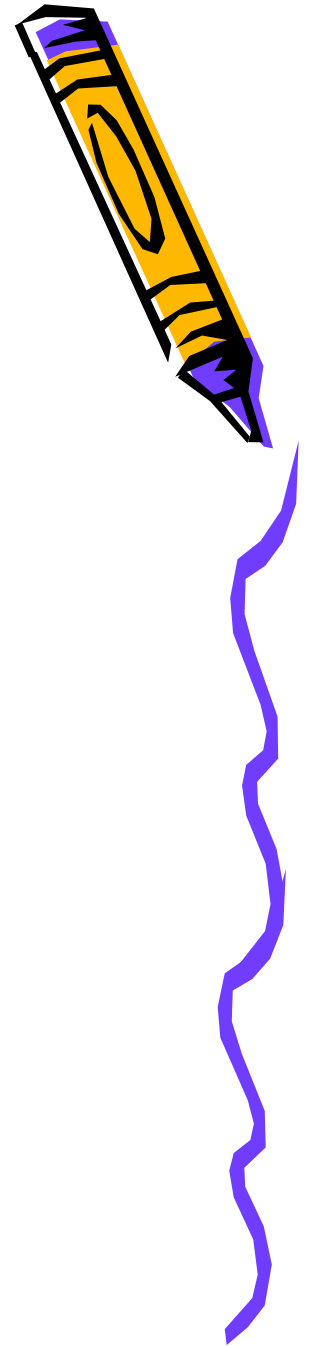
Tunni eesmärgid:

- 1) vaatleme, mis on ujumine füüsika seisukohalt
- 2) uurime, mis on uppumine, heljumine ja füüsikas
- 3) vaatleme, mis tingimistel:
 - a) keha ujub
 - b) keha upub
 - c) keha heljub

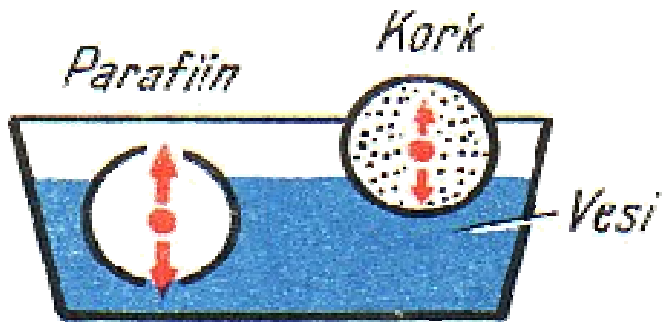


Õppematerjal

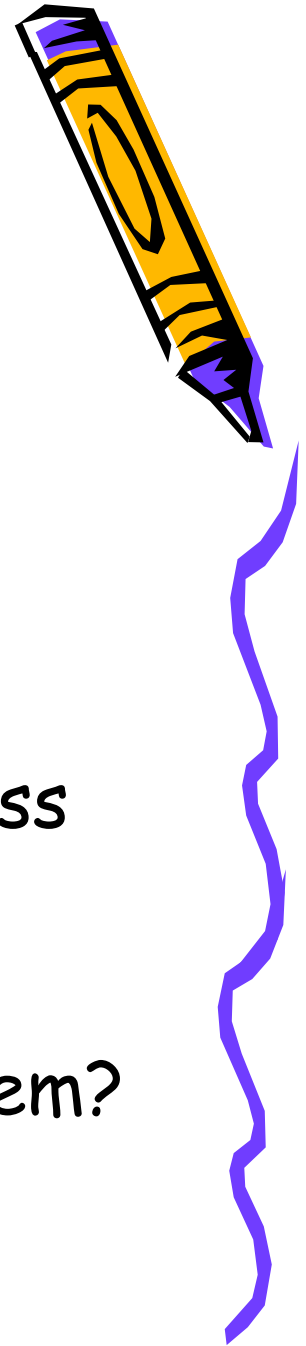
Õpikust lk. 121-124



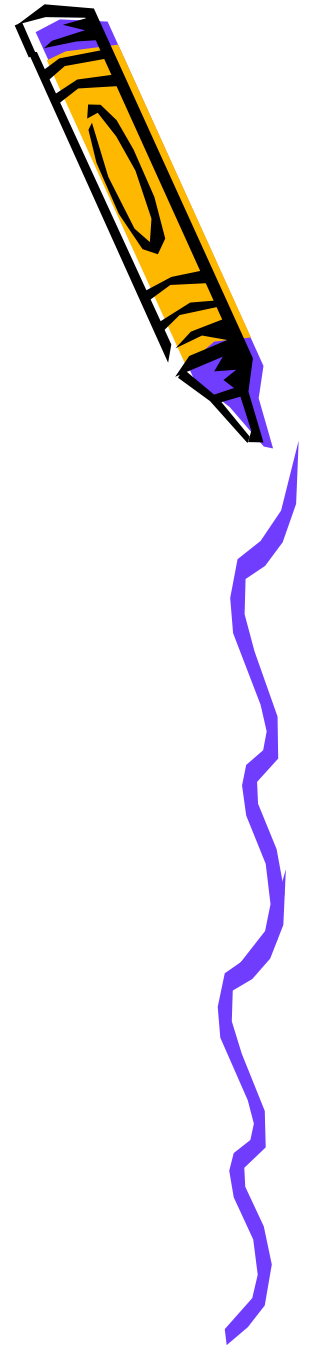
Kehade ujumise seos keha tihedusega



- Kuidas me arvutame tihedust?
- Kumma keha mass on suurem?
- Kumma keha tihedus on suurem?

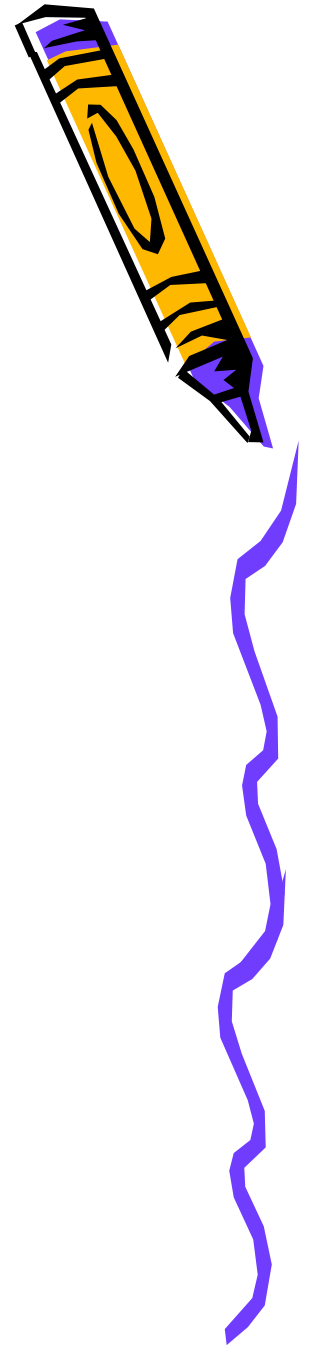
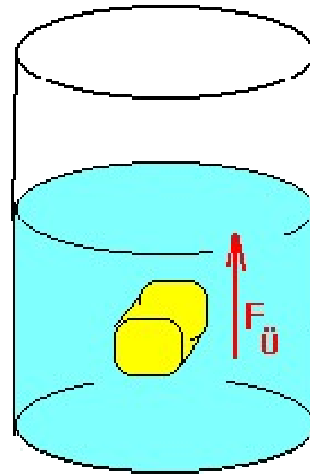
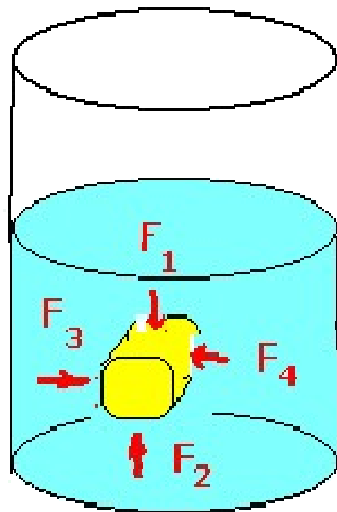


Miks laev ei upu?



Kehad vedelikus

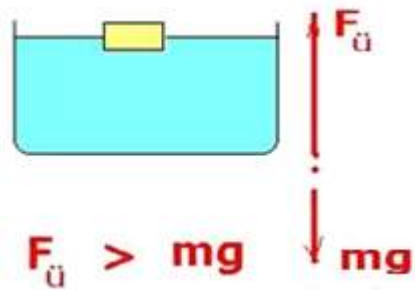
$F_{\text{ü}}$ - üleslükkejõud
mg-raskusjõud



Kehade ujumise tingimused:

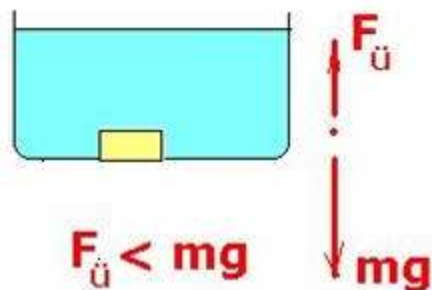
a) Ujub

$$\rho(\text{keha}) < \rho(\text{vesi})$$



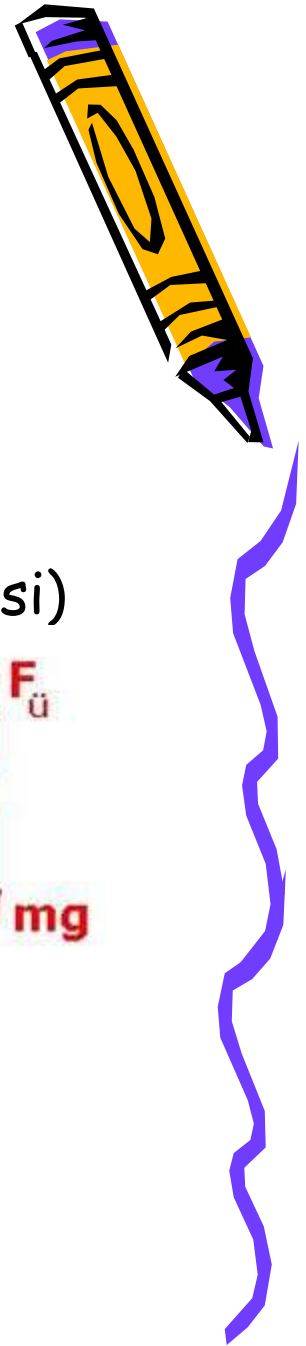
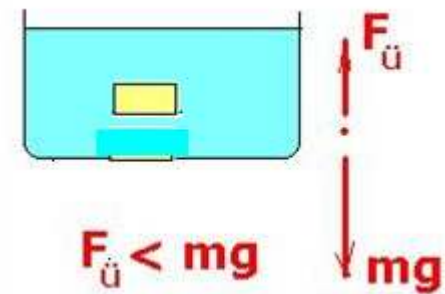
b) upub

$$\rho(\text{keha}) > \rho(\text{vesi})$$

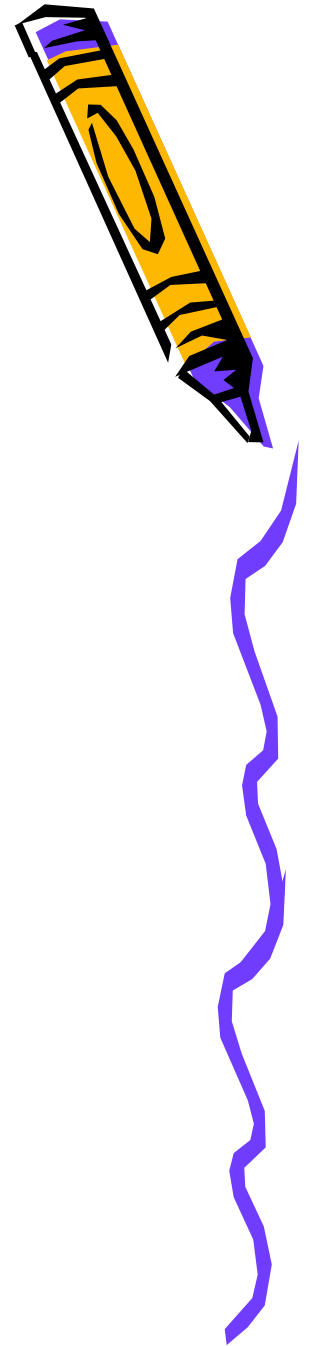
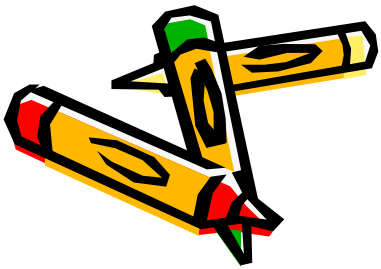
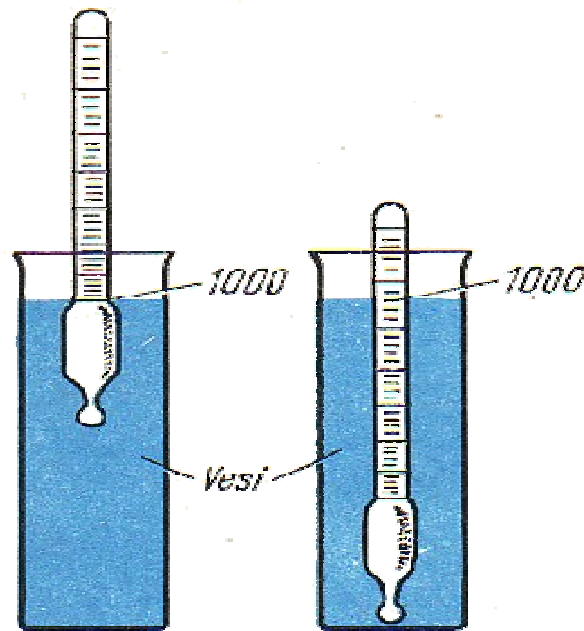


c) heljub

$$\rho(\text{keha}) = \rho(\text{vesi})$$

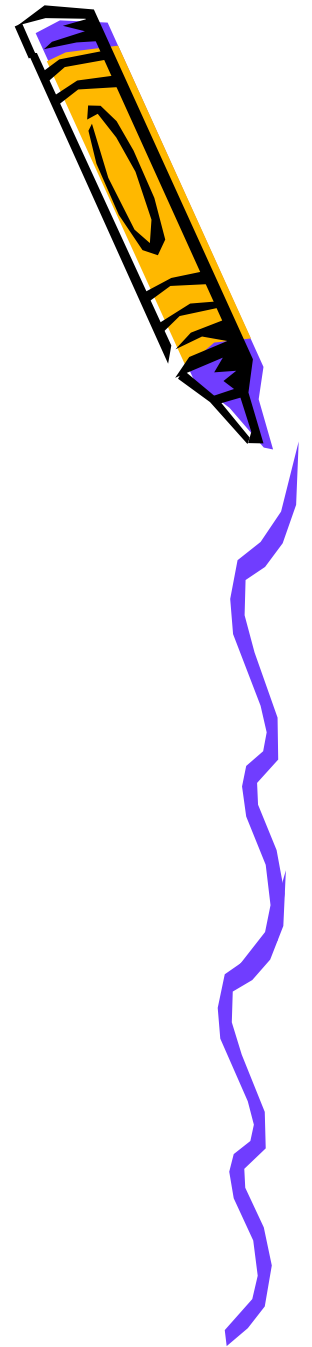


Aeromeeter- mõõteriist, millega saab mõõta vedeliku tihedust



Tunnist said teada:

- ✘ Keha ujub, kui üleslükkejõud on suurem kui raskusjõud
- ✘ Keha upub, kui üleslükkejõud on väiksem raskusjõust
- ✘ Keha heljub, kui üleslükkejõud on võrdne raskusjõuga



Täna tähelepanu eest!!!

Edukat õppimist!!! 😊😊😊

