Task 1

14-Oct-20

Determination of oligonucleotide concentration

You have obtained envelope from your favorite supplier. The envelope contained dried primer with sequence 5´- gTAAAACgACggCCAgT -3´.
The synthesis protocol says that the total amount of DNA is **approximately** 10 µg.
After dissolving the whole amount in 1 mL of TE buffer, in cuvette with optical length 1cm, you measured exact absorbance **A** at 260 nm.

1) What is the **precise** molar concentration of DNA in units µM (10^{-6}M)?
2) **How much was the light intensity reduced** after going through the cuvette if compared with the intensity of incident light? Report the transmitted light intensity **in percent of the original incident light intensity**.

http://www.molbiotools.com/dnacalculator.html
Please select „single strand“ in the parameters.

Absorbance values **A** are listed by your name below.
Please send me your short answers via email within 48 hours.
Correct answer = 1 point.

		A
1	Dikunová Alžbeta	0,300
2	Dzurov Matej	0,590
3	Faturová Jana	0,315
4	Gašparik Norbert	0,330
5	Hesko Ondrej	0,360
6	Jahodová Kateřina	0,375
7	Kameniarová Michaela	0,390
8	Konečná Kateřina	0,405
9	Korytářová Anna	0,420
10	Kozeleková Aneta	0,435

		A
111	Kubinyiová Lenka	0,450
12	Kůřilová Eliška	0,465
13	Lysáková Klára	0,585
14	Mikšátková Barbora	0,480
15	Nováková Barbora	0,495
16	Prabhullachandran Unnikannan	0,525
17	Procházková Markéta	0,540
18	Šimek Jan	0,555
19	Tužinčin Dávid	0,570