

Task 1

28-Feb-17

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.

Absorbance values **A** can be found in the table next to your name.

- 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 cuvette comparing the intensity of incident light? Report the transmitted light intensity **in percent of the original incident light intensity**.

For determination of oligonucleotide characteristics use calculator at

<http://eu.idtdna.com/calc/analyzer>

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	Akhmetgalieva, Valentina	0.360
2	Alispahic, Elma	0.520
3	Atatri, Sura S. M.	0.600
4	Ayhan, Ebubekir	0.650
5	Janovič, Tomáš	0.680
6	Lobello, Cosimo	0.700