MAKING THE INVISIBLE VISIBLE

10 - 15 second intervals: stagger start times to run many samples in parallel

β-galactosidase

ONPG

galactose

+ o-nitrophenol

UNDER THE HOOD

iTUNE DEVICES

BioBuilder
Educational Foundation
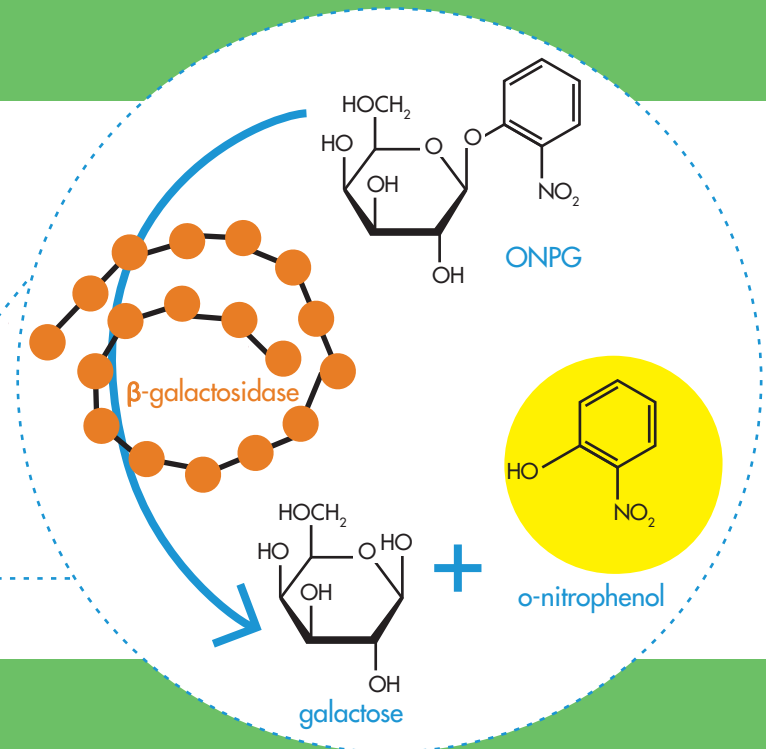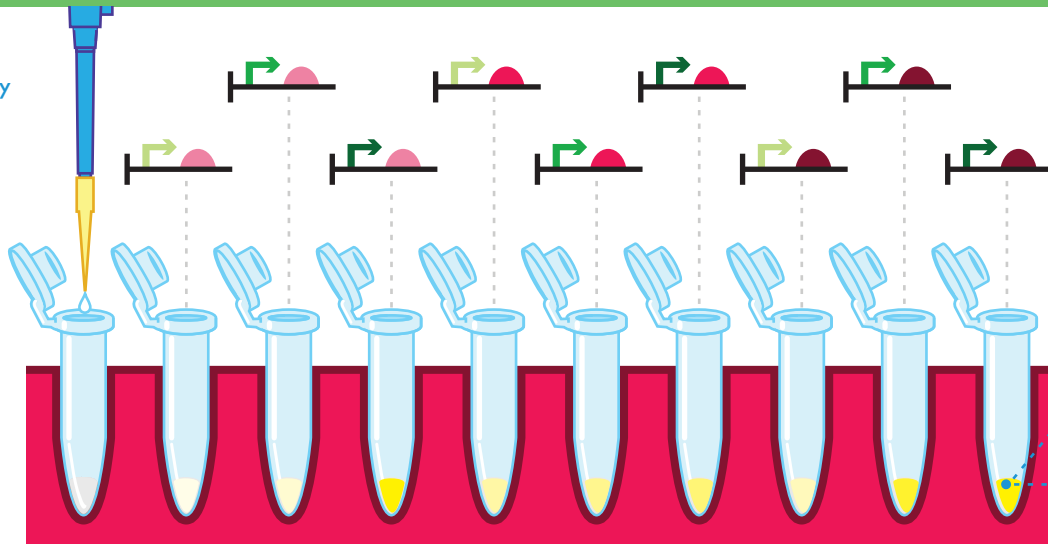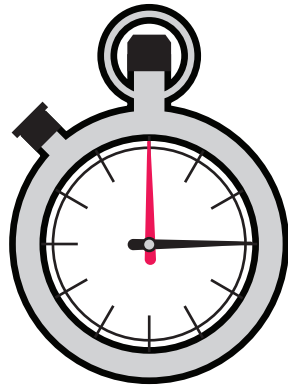
Mix and match Parts (RBS & Promoters) to make the iTunes library:

lacZ

Encodes β-gal

Weak   Promoters   Strong

Weak

RBS

Strong

RNA polymerase binds to promoter and makes mRNA

mRNA

Ribosomes bind to the RBS and make the β-gal enzyme

The more β-gal enzyme is made, the more enzymatic activity results

ATCG...