Measure atmospheric pressure to obtain height.

From here:
https://link.springer.com/article/10.1007/s40828-020-0111-6
we can obtain an expression for Pressure vs. Height.

$$P = P_0 e^{-g M \Delta h / R T}$$

We can define our constants

In[61]:=
```
g = 9.8;
M = 0.0289644;
R = 8.3144598;
temp = 290;
h0 = 35;
```

Use Solve to just check that things make sense. The pressure taken at the ground level of Marshak was 1010.764 Pa, and at the 13th floor, the pressure was recorded to be 1005.396. The height above sea level at the ground floor of Marshak is about 35 m.

In[66]:=
```
Solve[1005.396118 == 1010.763702 e^(-g M (h-h0))/(R temp), h]
```

Out[66]=
```
{{h → 80.23}}
```

Thus, we can see that the 13th floor of Marshak according to this measurement is about 80 meters above sea level.

Now, we can try to plot the data as recorded in Science Journal. I've put the file on my website, so you can play with it as well:

In[67]:=
```
pressureData = Import[
   "https://hedberg.ccnysites.cuny.edu/PHYS371/experiments/pressure-height/
     pressure-data.csv", "Dataset", "HeaderLines" → 1];
```

In[69]:=
```
ListPlot[pressureData, Frame → True, FrameLabel → {"time [ms]", "pressure [Pa]"}]
```

Out[69]=