(Catalysts)

Q1.(2019)

to reduce costs

to use less energy

Q2.a)(2019)

a glowing splint

Q2.b)(2019)

student **A** should measure the mass of manganese dioxide.

Q2.c)(2019)

calculate a mean but do not include any anomalous results.

Q2.d)(2019)

(volume of oxygen formed =)
(58 - 20 =) 38 (cm^3)

(time taken = 250 – 30 =)
220 (s)

$\frac{38}{220}$ **or** 0.1727 (cm^3/s)

= 0.173 (cm^3/s)

Q2.e)(2019)

line starts at the origin **and** steeper than existing line

final volume same as existing line

Q2.f)(2019)

fine manganese dioxide powder
has a larger surface area