1. Holmium (Ho) reacts quickly with hot water to form holmium hydroxide and hydrogen:

2 Ho(s) + 6 
$$H_2O(\ell) \rightarrow$$
 2 Ho(OH) $_3$  (aq) + 3  $H_2(g)$ 

The oxidising and reducing agents in this equation are

	Oxidising agent	Reducing agent
(a)	H <sub>2</sub> O	$H_2$
(b)	Но	$H_2O$
(c)	H <sub>2</sub> O	Но
(d)	Ho(OH) <sub>3</sub>	Но