A particle of mass $2\,\text{kg}$ is attached to one end of a light inextensible string of length $0.6\,\text{m}$. The other end of the string is attached to a fixed point on a smooth horizontal surface. The particle is moving in a circular path on the surface. The tension in the string is $20\,\text{N}$.

Find how many revolutions the particle makes per minute. [3]