

STUDENT: **What instrument is used to examine steam engine performance?**

TEACHER: ⇨ steam engine indicator

STUDENT: **What year saw the earliest recorded use of the steam engine indicator?**

TEACHER: ⇨ 1851

STUDENT: **What company developed the most successful steam engine indicator?**

TEACHER: ⇨ Charles Porter

STUDENT: **Who developed a successful steam engine indicator for Charles Porter?**

TEACHER: ⇨ Charles Richard

STUDENT: **Where was the Charles Porter steam engine indicator shown?**

TEACHER: ⇨ London Exhibition

STUDENT: **What instrument is used to examine diagram performance?**

TEACHER: ⇨ CANNOTANSWER

STUDENT: **What year saw the earliest recorded use of steam engines?**

TEACHER: ⇨ CANNOTANSWER

STUDENT: **What company developed the most successful steam engine?**

TEACHER: ⇨ CANNOTANSWER

Section:Steam engine12

Context: The most useful instrument for analyzing the performance of steam engines is the steam engine indicator. Early versions were in use by 1851, but the most successful indicator was developed for the high speed engine inventor and manufacturer Charles Porter by Charles Richard and exhibited at London Exhibition in 1862. The steam engine indicator traces on paper the pressure in the cylinder throughout the cycle, which can be used to spot various problems and calculate developed horsepower. It was routinely used by engineers, mechanics and insurance inspectors. The engine indicator can also be used on internal combustion engines. See image of indicator diagram below (in Types of motor units section).
CANNOTANSWER

STUDENT: **Who developed a successful steam engine for Charles Porter?**

TEACHER: ↪ CANNOTANSWER

STUDENT: **Where was the Charles Porter steam engine shown?**

TEACHER: ↪ CANNOTANSWER