## Essential Skills 6

The questions in this series of worksheets appear frequently.
These are the GIFTS you must take to succeed


Fractional Indices (Non Calculator)
Write the following in root form and then evaluate:

1. $8^{\frac{2}{3}}$
2. $9^{\frac{3}{2}}$
3. $16^{\frac{5}{4}}$
4. $1000^{\frac{2}{3}}$
5. $81^{\frac{3}{4}}$
6. $32^{\frac{2}{5}}$
7. $4^{\frac{5}{2}}$
8. $64^{\frac{1}{3}}$
9. $25^{\frac{1}{2}}$
10. $125^{\frac{4}{3}}$

## APPLYING QUESTIONS

1. Write $2 x^{-\frac{2}{3}}$ with positive powers and evaluate when $x=8$
2. If $f(x)=x^{\frac{5}{2}}$ evaluate $f(9)$
