SQL Cheatsheet

SELECT ... FROM

```sql
SELECT common_name, scientific_name
FROM Animal;
```

SELECT all columns

```sql
SELECT *
FROM Animal;
```

Comparing text

```sql
SELECT common_name, status
FROM Species
WHERE status = 'Endangered';
```

Comparing numbers

```sql
SELECT *
FROM Convict
WHERE arrived = 1788;
```

Comparing boolean values

```sql
SELECT *
FROM Species
WHERE ACT = true;
```

Comparing alphabetically

```sql
SELECT surname, first_name
FROM Convict
WHERE surname < 'L';
```

Comparing time

```sql
SELECT service_id, cordon_time, station
FROM Station
WHERE cordon_time >= '18:00:00';
```

Comparing date

```sql
SELECT surname, issued
FROM Convict
WHERE issued >= '1830-06-01';
```

Comparing two columns

```sql
SELECT *
FROM CountryMedal
WHERE silver >= gold;
```

Comparison operators

Operation	Operator
equal to	=
no equal to	<> (or !=)
less than	<
less than or equal to	<=
greater than	>
greater than or equal to	>=

Rows (table data)

Animal			
scientific_name	common_name	status	classification
Pseudomys fumeus	Konoom	Endangered	Mammalia
Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Mammalia
Petrogale penicillata	Brush-tailed Rock-wallaby	Vulnerable	Mammalia
...			

Columns (table structure)

Animal
- scientific_name
- common_name
- status
- classification

Data types

```
VARCHAR  - text
INTEGER  - whole number
BOOLEAN  - true or false
SMALLINT - small whole number
DATE     - formatted like 'YYYY-MM-DD'
REAL     - numbers with decimal points
TIME     - formatted like 'HH:MM:SS'
```

OR

```sql
SELECT *
FROM People
WHERE origin = 'Australia'
  OR destination = 'Australia';
```

AND

```sql
SELECT *
FROM CountryMedal
WHERE gold > 10
  AND silver > 10
  AND bronze > 10;
```

Combining OR with AND

```sql
SELECT *
FROM Station
WHERE direction = 'To City'
  AND (cordon_station = 'Jolimont'
    OR cordon_station = 'Richmond');
```

ORDER BY

```sql
SELECT *
FROM Wage
WHERE industry = 'Construction'
  AND year = 1998
  AND occupation = 'Plasterer'
ORDER BY real_wage DESC;
```

Sorting multiple fields

```sql
SELECT *
FROM CountryMedal
ORDER BY gold DESC, silver DESC, country ASC;
```