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## Research





Article submitted to journal

#### **Subject Areas:**

subject 1, subject 2, subject 3

#### Keywords:

one, two, optional, optional, optional

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# Template for preparing your research report submission to Royal Society Open Science using RMarkdown

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The abstract text goes here. The abstract text goes here.

### 1. Insert A head here

This demo file is intended to serve as a "starter file"" for articles submitted to the Royal Society Open Science journal using RMarkdown.

Place \EndFirstPage at the point where the plain text on the first page stops. Warning: excess text will be hidden behind the copyright box. The example below contains line 1 to 19 in the code. Lines 14 to 17 are hidden behind the copyright box.

#### (a) Insert B head here

Subsection text here.

#### (i) Insert C head here

Subsubsection text here.

Line 1

Line 2

Line 3

Line 4

Line 5

Line 6

Line 7

Line 8

Line 9

Line 10

Line 11

Line 12

Line 13

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Line 18

Line 19

THE ROYAL SOCIETY

:1.

#### 2. Lists

- one
- two
- three
- fruits
  - apples
    - \* macintosh
    - \* red delicious
  - pears
  - peaches
- vegetables
  - broccoli
  - chard

#### (a) Citations

Blabla [1] blabla. Blabla [2] blabla. Blabla [1,3] blabla. Blabla [2,4–6] blabla.

(i) Headling level 3

Subsubsection text here.

#### 3. R code

R code can be added as usual. Note that syntax highlighting is not available. Fig. 1 is a an example.

#234567890123456789012345678901234567890123456789012345678901234567890123456789012345

```
10
               20
                       30
                                 40
                                           50
summary(lm(mpg ~ disp, data = mtcars))
##
## Call:
## lm(formula = mpg ~ disp, data = mtcars)
## Residuals:
##
     Min
           1Q Median
                         30
                              Max
## -4.892 -2.202 -0.963 1.627 7.231
##
## Coefficients:
##
             Estimate Std. Error t value Pr(>|t|)
## disp
             -0.04122
                        0.00471 -8.75 9.4e-10 ***
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 3.25 on 30 degrees of freedom
## Multiple R-squared: 0.718, Adjusted R-squared: 0.709
## F-statistic: 76.5 on 1 and 30 DF, p-value: 9.38e-10
                                                               drat
                     cyl
                                   disp
                                                  hp
        mpa
## Min. :10.4 Min. :4.00
                              Min. : 71.1 Min. : 52.0
                                                           Min. :2.76
                                                                        Min.
```

1st Qu.:2.
Median :3.
Mean :3.
3rd Qu.:3.
Max. :5.

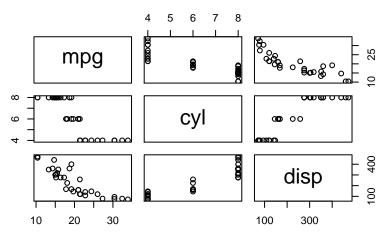


Figure 1. The caption

|    |              |               |               |               | : O          |
|----|--------------|---------------|---------------|---------------|--------------|
| ## | 1st Qu.:15.4 | 1st Qu.:4.00  | 1st Qu.:120.8 | 1st Qu.: 96.5 | 1st Qu.:3;∰8 |
| ## | Median :19.2 | Median :6.00  | Median :196.3 | Median :123.0 | Median :3:🕰  |
| ## | Mean :20.1   | Mean :6.19    | Mean :230.7   | Mean :146.7   | Mean :3:89   |
| ## | 3rd Qu.:22.8 | 3rd Qu.:8.00  | 3rd Qu.:326.0 | 3rd Qu.:180.0 | 3rd Qu.:3:8  |
| ## | Max. :33.9   | Max. :8.00    | Max. :472.0   | Max. :335.0   | Max. :4:8    |
| ## | qsec         | VS            | am            | gear          | carb:        |
| ## | Min. :14.5   | Min. :0.000   | Min. :0.000   | Min. :3.00    | Min. :1.00   |
| ## | 1st Qu.:16.9 | 1st Qu.:0.000 | 1st Qu.:0.000 | 1st Qu.:3.00  | 1st Qu.:2.00 |
| ## | Median :17.7 | Median :0.000 | Median :0.000 | Median :4.00  | Median :2.00 |
| ## | Mean :17.8   | Mean :0.438   | Mean :0.406   | Mean :3.69    | Mean :2.81   |
| ## | 3rd Qu.:18.9 | 3rd Qu.:1.000 | 3rd Qu.:1.000 | 3rd Qu.:4.00  | 3rd Qu.:4.00 |
| ## | Max. :22.9   | Max. :1.000   | Max. :1.000   | Max. :5.00    | Max. :8.00   |

Ethics. Please provide details on the ethics.

Data Accessibility. Please provide details on the data availability.

Authors' Contributions. Please provide details of author contributions here.

Competing Interests. Please declare any conflict of interest here.

Funding. Please provide details on funding

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