INDEPENDENT OBSERVATIONS		DEPENDENT OBSERVATIONS	
LINEAR MODELS LM		LINEAR MIXED MODELS LMM	
- Linear relation - Normal error distribution	lm( ) aov( )	- Linear relation - Normal error distribution - RANDOM FACTOR	lme( ) gls( ) lmer( )
GENERALISED LINEAR MODELS GLM		GENERALISED LINEAR MIXED MODELS GLMM	
- Linear relation - Error distribution: e.g. Poisson, Binomial	glm( ) multinom( ) polr( )	- Linear relation - Other error distribution: e.g. Poisson, Binomial	glmer( ) gee( ) glmmPQL( ) MCMCglmm( )
GENERALISED ADDITIVE MODELS GAM		GENERALISED ADDITIVE MIXED EFFECT MODELS GAMM	
- Non-linear relation	gam( )	- Non-linear relation	gamm( )

for GLM/ GLMM Models			
DISTRIBUTION	**family =**	**link function**	**link**
Binomial	binomial	log(M/(1-u))	logit
Poisson	poisson	log(M)	log
Normal	gaussian	u	identity
Gamma	gamma	1/u	inverse
Quasi	quasi	tan(pi(u-0.5))	cauchit

➔ RANDOM FACTOR!

lme = fits a mixed model for normally distributed data

gls = generalized least square model

glmmPQL = fits a generalized linear mixed model but does not use AIC or Likelihood!

lmer = fits a generalized linear mixed model & can deal with crossed random factors

glmer = as lmer but for non-normal data

MCMCglmm = gives the MCMC posterior distributions of the parameters. Accounts for overdispersion